



**International Conference
on
Challenges and Opportunities for Innovative Science,
Engineering and Technology**

**04 & 05 March 2021
Proceedings**



**Siddhartha Institute of Technology and Sciences
Narapally, Korremula Road, Ghatkesar Mandal Medchal
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Contents

S.No	Titles and Authors	Page No
01.	Challenge-Response Enabled Identity based Encryption in Cloud <i>*A Sasya Sree</i>	1
02.	Positioning the Single UAV for Improving the Data Transmission by Optimal Altitude and Bandwidth <i>*Aketi Santhosh</i>	2
03.	Secured two fold Encryption Protocol in cloud using Edge Computing Technique <i>*Aseena Shaik Babu</i>	3
04.	Effective Clustering Method for Quality aware Heterogeneous Sensor Network <i>*Balaji Guguloth</i>	4
05.	Nutrition Suggestion for Cancer Patient using Enhanced Long Short Term Memory Classifier <i>*Bandaru Rajani</i>	5
06.	Computing <i>*Chada Suresh</i>	6
07.	Avoiding Security Breaches in Group Communication using Recurrent Neural Network <i>*Damera Sammaiah</i>	7

08.	A Novel Approach for Disease Stages Classification based on Micro-Moments and Bert Technique	8
	<i>*Dr. Akella Satyanarayana</i>	
09.	3-D Graphical Representation of Banking Sector using Big Data based Intelligent Classifier	9
	<i>*Dr. Dinesh Kumar Rangarajan</i>	
10.	Disease Coherence Detection using Enhanced LSTM and Densenet based Deep Learning	10
	<i>*Dr. Srihari Chintha</i>	
11.	High Data Security in Cloud using the Rivest-Shamir-Adleman Encryption and Dividing Encryption Key	11
	<i>*Dr. T Sounder Rajan</i>	
12.	A Homogeneous Coordinate Function for Effective Data Transmission by Finding Optimal Altitude of UAV	12
	<i>*Dr. Velusamy Raja Kumareswaran</i>	
13.	Using Two Different Encryption Techniques for High Data Security in Edge Environment	13
	<i>*Elukapalli Harish</i>	
14.	Eliminating the Intersecting Problem using the Triple Cluster Heads by Density based Clustering Technique	14
	<i>*Ginnarapu Mahinder</i>	

15.	Good Diet Plan Recommendation for Diabetic Patients using Artificial Neural Network	15
	<i>✦Gokula Pavani Yadav</i>	
16.	An Effective Data Transmission in Fog using Limiting the Decryption Time Interval	16
	<i>✦Jongoni Srikanth</i>	
17.	Convolutional Neural Network for Enhancing the Communication with High Security	17
	<i>✦Karra Sangeetha</i>	
18.	Classifying the Cancer Stage of Patient using Linear Discriminant Analysis	18
	<i>✦Kiran Kumar Thanniru</i>	
19.	Social Media Impact Factor and Represent in Smart way using Intelligent Classifier	19
	<i>✦Kiranmai Kosanam</i>	
20.	Enhanced Artificial Neural Network and ResNet based Mining for Disease Coherence Detection	20
	<i>✦Kothagattu Ramu</i>	
21.	Enhanced Advanced Encryption Standard Technique to Ensure Safety of Data in Cloud	21
	<i>✦Krishnapur Sangamma</i>	
22.	Improve the Data Transmission by using the UAV Detection with Ensemble Detector	22
	<i>✦Manikanta Adi</i>	

23.	Ensemble Encryption Technique for High Data Protection using Edge Devices in Edge Cloud Environment	23
	<i>✱Nalla Ajay Kumar</i>	
24.	Overcoming Sensor Node's Energy Problem in Sensor Network Using Hierarchical Clustering	24
	<i>✱Nalla Navya Deepthi</i>	
25.	Suggest a Good and Automated Medical Diet System by Using Support Vector Machine	25
	<i>✱Nampally Prashanth</i>	
26.	Achieve High Security by Double Time Verification of User in Fog Environment	26
	<i>✱Naveengopal Goud Vaka</i>	
27.	Secure Key Transmission in Cloud Using Deep Learning Approach	27
	<i>✱Nomula Madhavi</i>	
28.	A Unique Technique for Illness Stage Categorization Using LSTM with Rule based Feature Extraction	28
	<i>✱Pasham Mamatha</i>	
29.	A Smart Representation of Medical Record Analysis using FP Mechanism	29
	<i>✱Pooja Vitthal Rao Padhe</i>	
30.	Skin Disease Coherence Detection using Enhanced Naïve Bayes Algorithm	30
	<i>✱Radhika Goli</i>	

31.	Conditional Random Field based Prediction of Power Distribution System with Deep Learning Approach <i>*S P Roja Rani</i>	31
32.	Ranked Keyword Search for Achieve Privacy Preserving in Cloud Environment By Edge Computing <i>*Saritha Banoth</i>	32
33.	Deming Regression Feature Selected Modest Adaptive Boosting Data Classification for Traffic Prediction in Cellular Networks with Big Data <i>*Sathish Vemula</i>	33
34.	An Enhanced Generative Adversarial Network for Unmanned Air Vehicles Anomaly Identification <i>*Sowjanya Reddy Mallreddy</i>	34
35.	Skin Disease Analysis using LSTM Neural Network with Feature Selection <i>*Sridhar Ambala</i>	35
36.	Machine Learning Enabled Future of Education System <i>*Vaddepally Santhosh</i>	36
37.	Enhanced LSTM with Feature Selection for Plant Disease Classification <i>*Varikuppala Ganesh</i>	37
38.	Twitter Sentiment Analysis using Conditional Generative Adversarial Network <i>*Veeraganti Soumya</i>	38

39.	Association Rule based Prediction of Power Distribution Model with Machine Learning Technique ✱ <i>Vijay Koraveni</i>	39
40.	Ensure High Privacy in Cloud using Edge Computing With Fuzzy Keyword Search Scheme ✱ <i>VNS Manswini</i>	40
41.	Selection of Routing Path using Classification Technique based Machine Learning Algorithms ✱ <i>Ambika Gannu</i>	41
42.	Detection of Anomaly from People Walking Style using Modified Recurrent Neural Network ✱ <i>Anil Moguram</i>	42
43.	Data Mining Techniques with XGB Feature Selection for Classification of Skin Disease ✱ <i>Ballepu Naveen Kumar</i>	43
44.	Privacy Preserving Re-Encryption and Effective Keyword Search of Cloud Data using Edge Computing ✱ <i>Bhookya Naveen</i>	44
45.	Data Mining Techniques with XGB Feature Selection for Abnormal Gait Analysis ✱ <i>Chebrole Santhi Swarupa</i>	45
46.	Resource Utilization Prediction by using Condition Random Field based SVM ✱ <i>Chintalakumar Shiva</i>	46

47.	Collision Prediction in Mobile Ad-Hoc Network using Deming Regression Feature Selection <i>*Dr. Arun Prasath Raveendran</i>	47
48.	Anomaly Detection in Autonomous Vehicles using Modified Convolutional Neural Network <i>*Dr. G Dhanalakshmi</i>	48
49.	Abnormal Gait Analysis using LSTM Neural Network with XGB Feature Selection <i>*Dr. Gopala Krishnan</i>	49
50.	Diagnosis of Skin Diseases Using LSTM with Feature Selection <i>*Dr. Sudhagar Govinda Swamy</i>	50
51.	Modified Code Division Multiple Access for Communication Optimization in Manet <i>*Fathima Zaheera</i>	51
52.	An Efficient and Flexible Multi Services for Internet Customers Using DVRP & Decision Tree <i>*Gattu Sandeep</i>	52
53.	Classification Stage of Covid in View Point of Heart Beat using Machine Learning <i>*ImmadiSETTY Venkata Prakash</i>	53
54.	Efficient Sentiment Recognition using the Perceptron Classifier <i>*Kale Jyothi Jeevana</i>	54

55.	Protect Data Securely using Twofish Algorithm with Key Agreement <i>*Kesireddy Archana</i>	55
56.	Prediction of Obstacles in USV Trajectory using Global Positioning System <i>*Kethavath Srilatha</i>	56
57.	Recurrent Neural Network with Apriori for Overall Coverage Classification <i>*Kodi Rajesh</i>	57
58.	An Efficient Healthcare Monitoring System for Diabetes Prediction using Extreme Gradient Boosting Technique <i>*M Vanish Sucharitha Santosh</i>	58
59.	For Support Vector Clustering an Enhanced Cluster Classification Method <i>*Madipalli Sumalatha</i>	59
60.	Enhanced Query Working Platform for Fog and Cloud Environment <i>*Mamidi Ranjith Reddy</i>	60
61.	Reliability Auditing Without a Trusted Authority using a Threshold Encryption Approach <i>*Mohammed Moqueed Ahmed</i>	61
62.	Effective Age Estimation from the Images using LSTM <i>*Muniyanaik Kethavath</i>	62

63.	Make Good Decision in Higher Studies based on Students' Performance using Association Rule Mining <i>*Nafiza Syed</i>	63
64.	Classifying the Breast Cancer Images using Deep Learning Method with Clustering Technique <i>*Narasimha Devani</i>	64
65.	Modified E-LSTM for Classifying the Protocols used for Communication <i>*Padala Pavan Kumar</i>	65
66.	Routing Protocols for High Data Transmission in Wireless Sensor Network <i>*Pillalamarri Sreesrinivas</i>	66
67.	Improve Multiple Services through Fog Environment using Divide & Conquer Algorithm with Apriori Algorithm <i>*Ramakrishna Pasula</i>	67
68.	Using Cart Technique for Classifying Covid in terms of Chest Pain Problem <i>*Ramesh Bhanothu</i>	68
69.	Visual Imagery Techniques for Image Sentiment Classification <i>*Ramesh Gugulothu</i>	69
70.	Secure Data Transmission in Cloud using Improved Proposed Encryption Standard <i>*Shirisha Munasa D</i>	70

71.	Efficient and Smooth Path for USV using Lasso Regression Technique ✦ <i>Srinivas Gadari</i>	71
72.	Health Policies Classification using a Learning Vector Quantization with CBP ✦ <i>Valiki Vijayabhaser</i>	72
73.	Effective Diet Plan Monitoring for Cancer Patients using Modified Multilayer Perceptron ✦ <i>Venkatesh Thota</i>	73
74.	Detection and Classification of Nodes in Manet using Modified SVM ✦ <i>Vijayapuram Keerthi</i>	74
75.	Instagram Comments Analysis for Get Popular using Text Mining Technique ✦ <i>Anagandula Naresh</i>	75
76.	Secure Data Transmission in Cloud using High Safe Security Techniques by Removing Intermediate Authority ✦ <i>Bomma Gopi</i>	76
77.	Modified Deep Belief Networks for Gender Estimation ✦ <i>Donthi Naveen Kumar</i>	77
78.	Select Perfect Employee based on Academic Performance using Machine Learning Algorithm ✦ <i>Dr. Manianayya Krishnan</i>	78

79.	Kidney Cancer Image Classification using CNN with Data Mining Method <i>*Dr. Mohd Abdulkareem</i>	79
80.	Clustering the Network Security Protocols for High Security in War Environment <i>*Dr. S F Kodad</i>	80
81.	Optimizing the Communication in Vanet using Machine Learning Techniques <i>*Dr. Sujoy Bhattachrya</i>	81
82.	Classifying the Multiple Cloud Services using the Machine Learning Techniques <i>*Ganesh Nomula</i>	82
83.	User Datagram Protocol for Identifying the Corona by Headache Problem <i>*Kalwala Srinivas</i>	83
84.	An Enhanced Natural Language Processing for Audio Sentiment Analysis <i>*Kommidi Vani</i>	84
85.	High Security for Confidential Data in Cloud Computing using Hash based Authentication Code <i>*Palvai Pravalika</i>	85
86.	An Enhanced Ridge Regression with LDA for Effective Path Identification of UAV <i>*Paravasthu Varunkrishn</i>	86

87.	A Random Forest with Weighted Association Rules for Classify Education Policy	87
	<i>✦Patlolla Rushikesh Rao</i>	
88.	Continuous and Effective Tracking of E-Commerce Market Share using Artificial Neural Network	88
	<i>✦Rachakonda Neeraja</i>	
89.	Detecting Abnormal Activity of USV using Enhanced Clustering Method	89
	<i>✦Srujana Yadav Choppari</i>	
90.	Effective Search Process in Cricket Score Report using Modified Query Platform	90
	<i>✦T Sowmya</i>	
91.	Good and Smooth Data Exchange in Fog Computing Environment using Idea and HMAC Techniques	91
	<i>✦Dr. Velusamy Raja Kumareswaran</i>	
92.	Resnet with Data Mining Technique for Evaluating the Crowd Density	92
	<i>✦Saritha Banoth</i>	
93.	Deep Learning Technique For Predict The Performance of Medical Student	93
	<i>✦Ambika Gannu</i>	
94.	Neural Network Regression for Brain Disease Classification	94
	<i>Fathima Zaheera</i>	

95.	Detection of Abnormal Signals based on Management Protocols using Lasso Regression	95
	<i>*Kodi Rajesh</i>	

**International Conference on Challenges and Opportunities for
Innovative Science, Engineering and Technology**

**01. CHALLENGE-RESPONSE ENABLED IDENTITY BASED
ENCRYPTION IN CLOUD**

A Sasya Sree, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Cloud computing provides enormous applications to the people in the real world. One of the most commonly used applications is cloud storage. Most of the people uses cloud storage space to reduces the local system overhead and make availability of data on time. The moving of data from user to cloud will raise the security and confidentiality concerns of data. To safeguard the data confidentiality many of the encryptions technologies are used. To achieve security in cloud computing, this paper proposed an Identity Based Encryption (IBE) with access time slot of each and every user. It facilitates the data encrypted by the user identification and additionally a particular access time slot will be mapped with that user ID. For enhancing the security, the encryption key is divided into two parts, one is with the data owner and another part is with the cloud. The data integrity is verified by the integrity auditing method with the challenge-response game. The proposed work ensures the data confidentiality; user verification and effective data integrity checking with low computation cost.

**02. POSITIONING THE SINGLE UAV FOR IMPROVING
THE DATA TRANSMISSION BY OPTIMAL ALTITUDE
AND BANDWIDTH**

Aketi Santhosh, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

FANETs (Flying Ad hoc Networks) are a type of network that comprises a number of tiny Unmanned Aerial Vehicles (UAVs) that are connected in an ad hoc fashion and organized into a team to fulfill lofty goals. Due to its extremely flexible installation and agility, there has been a rising interest in employing UAVs for strong wireless communication technology in recent years. However there are many advantages of using UAVs for communication, there are a number of obstacles to overcome. This paper is proposed a Frenet Coordinate Points with Exhaustive Search (FCPES) technique to overcome the altitude and bandwidth problems of UAV during communication with users. The proposed work comprises three major phases. In the first phase, the position of the user and UAV is transforming from Cartesian coordinate point (CCP) to Frenet Coordinate point (FCP). Then exhaustive search is used for optimal altitude and optimal bandwidth calculation to improve the data transmission among users and UAV. This proposed work improves the data transmission which results in a high throughput rate compared with other algorithms. At the same time, the proposed framework requires only less computation time and takes less time to find paths between the user and UAV when compared to other methods.

**03. SECURED TWO FOLD ENCRYPTION PROTOCOL IN
CLOUD USING EDGE COMPUTING TECHNIQUE**

Aseena Shaik Babu, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

With IoT device installations and the introduction of 5G fast connectivity, edge computing is playing an increasingly important role. Edge computing places processing and analytics near to where data is produced. Data is being treated, digested, and supplied by millions of devices all around the world thanks to edge devices. Edge-computing platforms are continuing to be driven by the increasing rise of internet-connected devices (the IoT) and new applications that demand real-time computing capability. Because of benefits such as minimal latency and real-time accessibility. Edge Computing is intended to provide real-time data transfer between the company and the client. This work proposes the Secured Two Fold Encryption Protocol in Edge Computing, which is made up of two encryption strategies in cloud server: proxy re-encryption with searchable encryption, to address numerous issues related to protection and confidentiality concerns. This work focuses on safeguarding data in the cloud against attackers by using a double encryption method. In this work, Resource Manager is offered as a way to decrease the encryption process's processing cost.

**o4. EFFECTIVE CLUSTERING METHOD FOR QUALITY AWARE
HETEROGENEOUS SENSOR NETWORK**

Balaji Guguloth, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Wireless sensor networks are increasing in popularity in academic circles these days because they can serve a wide range of applications, including multimedia applications. WSN is being the energy-demand network. To overcome this problem, a new QoS – aware Heterogeneous Energy Efficient Clustering (QHEEC) Protocol is to be proposed in this work. The QHEEC protocol achieves Quality-of-Service (QoS) improvement through energy efficiency techniques. Three main stages are presented in this QHEEC protocol that are cluster formation, Cluster Head (CH) selection, and Node selection. Most of the existing works uses single CH which is not more efficient, so multiple CHs named as First Cluster Head (FCH) and Next Cluster Head (NCH) are used in this work. Four different energy levels of nodes are used in this work. The novelty is made on FCH, NCH selection and node selection process. Overlapping of nodes and their ranges are the major problem which leads to data redundancy and energy dissipation, but it is not addressed in many works. In the node selection stage, this overlapping problem is addressed by proposing a new energy level based waking and sleeping mode mechanism. Simulation results show that the proposed QHEEC protocol is an effective technique in terms of network lifetime, throughput, energy consumption and stability.

o5. NUTRITION SUGGESTION FOR CANCER PATIENT USING ENHANCED LONG SHORT TERM MEMORY CLASSIFIER

Bandaru Rajani, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Cancer patients must eat well to follow a healthy diet, healthful body tissue, and energy, as well as to reduce adverse effects during and after treatment. The main focus of this work is to protect the patients against cancer and to increase the protection longevity using a cloud based artificial intelligent automated medical diet system. This paper proposes an Enhanced Long-Short Term Memory (E-LSTM) for cancer patients which automatically predicts which food should be taken by which cancer patient based on the nutrition analysis of food image. In E-LSTM, the classification is performed by analyzing both the positive and negative nutrition's in food item for each patient on food image dataset and cancer patients' dataset. By critically analyzing prominent research papers that relate to deep learning techniques to classify food and their nutrients composition, Long-Short Term Memory (LSTM) is found to be one of the best deep learning techniques used for classification. To the best of our knowledge, this is the first work that produces a new layer for feature extraction and provides nutrition suggestions especially for cancer patients using LSTM technique. A dedicated layer for feature extraction in E-LSTM improves the accuracy of prediction and classification. Result shows that the proposed technique is outperformed the existing techniques in terms of precision, recall & F1 Score, classification accuracy, training loss and validation loss.

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o6. COMPUTING

Chada Suresh, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Because of the fast rise of cloud technology, more people and businesses are receiving data in the cloud. Fog computing is a cloud-to-end device interface that reduces cloud overhead and improves network services while ensuring safe data transfer. Identity Based Broadcast Encryption with Decrypting Time Interval (IBBE-DTI) is a system suggested in this research for securely safeguarding data on cloud servers. This allows information to be encrypted using an authentication token, which is a mix of the user's secret key and identity. To improve cloud security, data owners can also provide a decrypting timer alongside the information to be encrypted, resulting in the creation of a new decryption key known as the Time Secret Key (TSK). This research presented a dual verification technique for effective user verification based on an identification token supplied by the data owner and a Unique Signature generated by the fog processor during encryption. For fast data transfer with minimum computing cost, this suggested approach enables both data confidentiality and user identification.

**o7. AVOIDING SECURITY BREACHES IN GROUP
COMMUNICATION USING RECURRENT NEURAL NETWORK**

Damera Sammaiah, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Group forward and backward secrecy, as well as group interaction, necessitate excellent data security. Several studies have been produced to address these problems, yet their solutions are still flawed. To overcome this issue, we propose a novel recurrent neural network based key transfer system. This protocol provides safe group interaction in the cloud using an auto encoder-based generative adversarial network structure, allowing users to submit their key or reaction in a secure way. In order to increase the security and efficiency of the key transmission protocol, the recommended approach is enhanced by adding recurrent neural network techniques. The study's findings outcomes suggest that our proposed procedure enhances attack prediction accuracy and reliability while reducing process time.

**o8. A NOVEL APPROACH FOR DISEASE STAGES
CLASSIFICATION BASED ON MICRO-MOMENTS
AND BERT TECHNIQUE**

Dr. Akella Satyanarayana, Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Apart from the energy used for residential cooling and heating, household appliances consume a significant amount of energy. The quantity of energy consumed by appliances is highly dependent on the activities of the building's occupants. People's emotions are also complicated, ranging from happiness to sadness, anger to fear, surprise, and so on. Different emotions can coexist, and the degree of each feeling is determined by the individual's mental state. So, to analyze the behavior of occupants, this work uses power consumption level of each appliance. First, the rule based model is used to extract micro-moment features from power data. Then, based on extracted features, BERT technique performs classification in two levels. First level classification outputs the emotions of occupant into six types such as happy, violence, fear/ calmness, solitude and demoralize. Next level classification outputs are the stages of disease, the occupant suffer. Pre-training of BERT model further increases the classification accuracy of the model. To best of our knowledge, this is the first work to use power data for disease stage classification. Furthermore, the classification accuracy of the proposed model is compared with LSTM, CNN and also evaluated in terms of ROC, precision-recall and F1 score. The experimental results reveal that the proposed model, which employs a BERT technique is successful in classifying emotion and disease stages. Also, the proposed method is proved to attain 10% efficient than the existing systems.

**09. 3-D GRAPHICAL REPRESENTATION OF BANKING
SECTOR USING BIG DATA BASED INTELLIGENT CLASSIFIER**

Dr. Dinesh Kumar Rangarajan, Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Since the banking sector is considered an important part of the modern economy, its performance is significant. Banks must be closely evaluated and analyzed in order to maintain a stable banking environment and an efficient economy. Also, it is essential to assess their asset quality, achievement of their goals and level of bank services to fulfill the benefit of the customers. It will be useful if the performance of the bank is represented graphically because graphical representation of text data are easy to understand and are used to exhibit the relationship between ideas, data, information, and concepts in a visual map or diagram. So, word cloud, one of the popular visualization techniques, is used here to associate a series of text data. This study analyze the banking dataset using Big Data Analytics (BDA) to collect the statistics of the performance of any bank and represent it using 3D word cloud. Also, to assess score for bank's functioning, an Enhanced DFAC-FFP technique is proposed using Particle Swarm Optimization Frequent Pattern (FP) FP-Growth with MapReduce. To the best of one's knowledge, this is the first work in the 3D graphical representation of banking sector using classifiers in BDA. A scoring concept is newly added in the classification process for getting highly accurate output. The comparison results shows that the proposed classification technique is efficient than the existing DFAC-FFP and MapReduce Associative Classifier (MRAC+) techniques in terms of model complexity and computation time. Also, memory usage is reduced, and the user interface is significantly enhanced in the proposed work.

**10. DISEASE COHERENCE DETECTION USING ENHANCED
LSTM AND DENSENET BASED DEEP LEARNING**

Dr. Srihari Chintha, Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

In today's world, the most important reason for mortality is heart disease. While analyzing clinical data, forecasting cardiovascular disease has become a challenging task. For better decision making and prediction of health related data, Deep Learning (DL) is very useful. Existing approaches focus only on heart disease prediction using DL and Machine Learning methods. In this paper, a novelty method named Embellished LSTM (E-LSTM) was proposed that aims at predicting the probability of heart disease from eye disease. In E-LSTM, the new layer named precise layer was introduced to find severity level of the disease. This helps the doctors to proceed the treatment for patients quickly. Also, dropout has been added to LSTM to avoid overfitting problem. The Central Retinal Artery Occlusion (CRAO) and Coronary Artery Disease (CAD) is predicted parallelly by the proposed method. Then, the coherence relationship between CRAO and CAD is calculated. DenseNet is used in this work to avoid the gradient disappearance of the neural network. Up to our knowledge, this is the first work to predict the possibility and the coherence rate of occurrence of heart disease using eye disease. While predicting the heart disease, 94.9% accuracy was achieved with E-LSTM.

**11. HIGH DATA SECURITY IN CLOUD USING THE RIVEST-
SHAMIR-ADLEMAN ENCRYPTION AND DIVIDING
ENCRYPTION KEY**

Dr. T Sounder Rajan, Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

People benefit greatly from cloud computing in the real world. In recent years, cloud storage has become the most popular application. The essential principle for users who utilize cloud storage is to eliminate the local system process overhead and make data available on time. Data exchange from user to cloud will exacerbate data security and confidentiality issues. Many encryption mechanisms are employed to ensure data secrecy. A Rivest-Shamir-Adleman encryption technique is proposed with the small enhancement of time restriction for the data access. The encryption key is split into two halves to boost security. With cheap computation costs, the suggested approach guarantees privacy protection, strong authentication, and efficient data accuracy verification.

**12. A HOMOGENEOUS COORDINATE FUNCTION FOR
EFFECTIVE DATA TRANSMISSION BY FINDING
OPTIMAL ALTITUDE OF UAV**

Dr. Velusamy Raja Kumareshwaran, Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Flying Ad hoc Networks are a model of network made up of a group of tiny unmanned aerial vehicles that are connected in an ad hoc way and arranged into a team to reach high goals. In recent years, interest in using UAVs for robust wireless communication technologies has grown because to their incredibly flexible installation and agility. While there are a number of advantages to using UAVs for communication, there are also some hurdles to overcome. The Homogeneous Coordinate Points with Exhaustive Search (HCPES) approach is developed in this study to tackle the altitude and bandwidth difficulties that UAVs face when communicating with consumers. There are three primary phases to the proposed work. The user's and UAV's positions are transformed from Polar coordinate point (PCP) to Homogeneous Coordinate point (HCP) in the first phase (FCP). In comparison to existing techniques, the proposed framework requires less calculation time and takes less time to discover pathways between the user and the UAV.

13. USING TWO DIFFERENT ENCRYPTION TECHNIQUES FOR HIGH DATA SECURITY IN EDGE ENVIRONMENT

Elukapalli Harish, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Edge computing is quickly expanding, thanks to the increase of IoT devices and the launch of 5G fast wifi. Edge computing is revolutionizing the way data is managed, interpreted, and delivered from millions of devices all around the world. Edge computing connects the company with the customer in real-time data transfer. Blowfish algorithm and homomorphic algorithm are used in this work for providing the high data security. This work concentrates on safeguarding data in the cloud against attackers by using a twin encryption method. To decrease the computational cost in the encryption process, Resource Manager is presented in this article. By using two encryption method the security of data is increased while compared with other techniques.

**14. ELIMINATING THE INTERSECTING PROBLEM USING
THE TRIPLE CLUSTER HEADS BY DENSITY BASED
CLUSTERING TECHNIQUE**

Ginnarapu Mahinder, Associate Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Wireless sensor networks are getting more and more popular in academics because they would be employed for a variety of applications, including multimedia. WSN is the energy consumption network. This presentation will provide a novel energy conscious density based clustering approach to overcome this issue. Most prior works utilize a single CH, which is inefficient, but this work employs several CHs dubbed First Cluster Head (FCH), Next Cluster Head (NCH) and Intermediate Cluster Head (ICH). This study used five distinct node energy levels. The innovation is based on the FCH, NCH, ICH and node selection processes. In terms of network lifetime, throughput, energy consumption, and stability, the suggested density based clustering protocol is a successful approach.

**15. GOOD DIET PLAN RECOMMENDATION FOR DIABETIC
PATIENTS USING ARTIFICIAL NEURAL NETWORK**

Gokula Pavani Yadav, Associate Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Diabetic patients must eat well to follow a healthy diet, and energy, as well as to reduce adverse effects during and after treatment. The main purpose of this study is to employ a cloud-based artificial intelligence automated diagnostic diet system to safeguard diabetic patients and extend their protected lifespan. This research offers an Enhanced Artificial Neural Network (EANN) for diabetes patients that automatically determines which meal should be consumed based on nutrition analysis of food images. To the best of our knowledge, this is the first study to use the ANN approach to create a new layer for feature extraction and offer dietary recommendations, particularly for diabetes patients. In terms of precision, recall, and F1 Score, classification accuracy, training loss, and validation loss, the suggested approach outperforms the existing techniques.

**16. AN EFFECTIVE DATA TRANSMISSION IN FOG USING
LIMITING THE DECRYPTION TIME INTERVAL**

Jongoni Srikanth, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

As a consequence of the fast expansion of cloud-based services, a large number of people and businesses are obtaining data in the cloud. Fog computing is a cloud-to-end device interface that reduces cloud overhead simultaneously improving network services and ensuring data quality. Triple Data encryption standard is a solution recommended in this study for safely securing data on cloud servers. To strengthen security measures, data owners might include a decryption timer with the encrypted messages, resulting in the production of a new decryption key known as the time limit secret key. By limiting the decryption time the unwanted access or unauthorized user access the secret data will be avoided which enhances the security of the user's data.

17. CONVOLUTIONAL NEURAL NETWORK FOR ENHANCING THE COMMUNICATION WITH HIGH SECURITY

Karra Sangeetha, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Maintain confidentiality is the essential thing when an interaction is happen between two persons or among number of people called team. Various studies have already been made to address these problems, yet their solutions are still problematic. For solve this obstacle, we propose a novel convolutional neural network based key distribution system. This framework provides safe team interaction in the cloud using an encryption based convolutional network structure, letting users to upload their key or answer in a secured environment. The MD5 hash algorithm is used in this protocol to provide a secure communication session. When compared to existing approaches, the study's findings reveal that our suggested protocol provides very robust security.

18. CLASSIFYING THE CANCER STAGE OF PATIENT USING LINEAR DISCRIMINANT ANALYSIS

Kiran Kumar Thanniru, Associate Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Emotional responses are diverse, varying from joy to sorrow, rage to fear, amazement, and so on. Conflicting reactions can exist side by side, and the intensity of each is governed by the person's state of mind. To determine occupant habits, this study examines the power consumption percentages of each item. To begin, an apriori algorithm based model is used to extract micro properties from power data. The Linear Discriminant analysis technique then conducts two phases of categorization based on the collected properties. For classify the stage of cancer, at first step the emotional response of the people in the home is find out. Then at the second step, the disease stage was predicted like the person is at the starting, intermediate or severe stage of the cancer by using the power information of the home items. This is the first study we're aware of that uses power statistics to classify cancer stages of the person the in home.

**19. SOCIAL MEDIA IMPACT FACTOR AND REPRESENT IN
SMART WAY USING INTELLIGENT CLASSIFIER**

Kiranmai Kosanam, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

In order to preserve an awareness environment and an effective economy, social media must be regularly reviewed and studied. In order to meet the needs of clients, it is also necessary to examine their asset quality, target attainment, and degree of social media services. Because graphical representations of text data are easy to grasp and are used to illustrate the link between ideas, facts, information, and concepts in a visual map or diagram, it will be beneficial if the performance of the social media impact factor is represented visually. So, to associate a sequence of text data, a word cloud, one of the most common visualization approaches, is utilized. This model utilizes Big Data Analytics to evaluate a social media dataset in order to obtain information on the effectiveness of any application and show it in a 3D word cloud. In addition, applying Time changing acceleration coefficient Particle Swarm Optimization (TVAC PSO), an Enhanced TVAC approach is presented to evaluate rating for application functionality. This is, to the best of one's knowledge, the first effort in 3D graphical depiction of the social media industry utilizing classifiers in big data technology.

**20. ENHANCED ARTIFICIAL NEURAL NETWORK AND
RESNET BASED MINING FOR DISEASE COHERENCE
DETECTION**

Kothagattu Ramu, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Heart disease is becoming the leading cause of death in the modern world. Predicting coronary heart disease while examining clinical data has proven to be difficult. Data mining is extremely effective for making better decisions and predicting health-related information. Currently available technologies use deep learning and machine learning to forecast cardiac disease. This research proposes Embellished ANN (E-ANN), a unique approach for forecasting the likelihood of cardiovascular diseases from eye illness. To discover the illness severity rating in E-ANN, a new layer called precise layer was added. The suggested technique predicts Central Retinal Artery Occlusion (CRAO) and Coronary Artery Disease (CAD) in tandem. After that, the CRAO-CAD coherence connection is determined. ResNet is used in this work to keep the neural network from losing its gradient. E-ANN had a 93.5 percent accuracy rate when it came to predicting heart disease.

**21. ENHANCED ADVANCED ENCRYPTION STANDARD
TECHNIQUE TO ENSURE SAFETY OF DATA IN CLOUD**

Krishnapur Sangamma, Assistant Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

In the real world cloud computing offers huge advantages to the people. Cloud storage is the most often used application in the recent years. To reduce the local system process overhead and make availability of data on time is the key concept for people to use the cloud storage. The sharing of data from user to cloud will increase the security and confidentiality worries of data. To maintain the data confidentiality many of the encryption technologies are used. To attain security in cloud, this paper proposed an Advanced Encryption Standard (AES) with access time slot for every user. It enables the data encrypted by the user identification and additionally a particular access time slot will be mapped with that user ID. To improve the security, the encryption key is separated into two parts, one key is with the cloud and another part is with the data owner. The data reliability is verified by the integrity auditing method with the challenge based process. The proposed work ensures the data privacy; user authentication and effective data reliability checking with low calculation cost.

22. IMPROVE THE DATA TRANSMISSION BY USING THE UAV DETECTION WITH ENSEMBLE DETECTOR

Manikanta Adi, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Flying Ad hoc Networks are a form of network that consists of a collection of small unmanned aerial vehicles that are connected in an ad hoc manner and organized into a team to achieve high goals. Although there are several benefits to employing UAVs for communication, there are also challenges to solve. The UAV detection with ensemble detector approach is developed in this study to tackle the altitude and bandwidth difficulties that UAVs face when communicating with consumers. When compared to existing techniques, our suggested approach enhances data transfer, resulting in a high throughput rate. Simultaneously, the suggested architecture necessitates reduced computing time.

**23. ENSEMBLE ENCRYPTION TECHNIQUE FOR HIGH DATA
PROTECTION USING EDGE DEVICES IN EDGE CLOUD
ENVIRONMENT**

Nalla Ajay Kumar, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

With the rise of IoT devices and the introduction of 5G fast wireless, edge computing is growing rapidly. By putting computation and analytics near to where data is generated, edge computing may be more cost-effective. The way data is handled, processed, and distributed from millions of devices across the world is changing thanks to edge computing. Edge-computing systems are being driven by the increasing proliferation of internet-connected gadgets (the IoT), as well as new applications that demand real-time computing capability. Because of various benefits such as minimal latency and real-time availability. Edge Computing is utilized to bring Company and Customer together in real-time data transmission. To solve a number of issues with cloud server security and privacy problems, this work proposed an ensemble encryption technique which is known as using of two encryption techniques to ensure high data security. Here Diffie-Helman algorithm and Digital signature algorithm are used for encryption process. High data security is achieved by using the proposed work with low computation overhead.

24. OVERCOMING SENSOR NODE'S ENERGY PROBLEM IN SENSOR NETWORK USING HIERARCHICAL CLUSTERING

Nalla Navya Deepthi, Associate Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Wireless sensor networks are getting successful in academia these days because they may be used for a wide range of applications, including multimedia. The energy-demand network is WSN. To address this issue, this paper will present a new energy aware hierarchical clustering protocol. Cluster creation, Cluster Head (CH) selection, and Node selection are the three primary steps in this proposed protocol. Intersecting of nodes and their distances is a serious issue that causes data redundancy and energy waste, yet it is rarely addressed in research. This intersecting problem is addressed at the node selection step by introducing a novel energy level-based waking and sleeping mode method. When compared with other existing work the proposed method completely eliminate the energy problem and intersecting problem by the hierarchical based clustering method.

**25. SUGGEST A GOOD AND AUTOMATED MEDICAL DIET
SYSTEM BY USING SUPPORT VECTOR MACHINE**

Nampally Prashanth, Associate Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

The major objectives of this work is to use a cloud-based artificial intelligent automated medical diet system to protect patients from cancer and improve their protective lifetime. This research presents a Support Vector Machine for cancer patients that automatically predicts which meal each cancer patient should consume based on nutrition analysis of food images. The classification in SVM is done by examining both the good and bad nutrition in food items for each patient on the food picture dataset as well as the cancer patients' dataset. SVM is discovered to be one of the finest classification strategies utilized for classification after rigorously reviewing major research articles that deal to classification approaches to categorize food and its nutrients composition. When compared with other algorithms the proposed work improves the prediction and classification accuracy.

**26. ACHIEVE HIGH SECURITY BY DOUBLE TIME
VERIFICATION OF USER IN FOG ENVIRONMENT**

Naveengopal Goud Vaka, Associate Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Numerous people and companies are getting data in the cloud as a result of the rapid advancement of cloud - based services. Fog computing is a cloud-to-end device interface that lowers cloud overhead and enhances network services while maintaining data security. Fully Disk encryption is a system suggested in this research for securely safeguarding data on cloud servers. Based on an identifying token provided by the data owner and a Unique Signature created by the fog processor during encryption, this research developed a dual verification approach for successful user verification. This recommended solution offers both data secrecy and user identification for quick data transport with little computational expense.

**27. SECURE KEY TRANSMISSION IN CLOUD USING
DEEP LEARNING APPROACH**

Nomula Madhavi, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Security breaches such as group forward as well as backward confidentiality, group interaction requires high data security. Several works have been written to address these issues, but their remedies still have flaws. We propose a new deep learning-based key transmission protocol to address this problem. This protocol uses an auto encoder-based generative adversarial network structure to provide secure group interaction in the cloud, allowing users to send their key or response in a secure manner. In order to construct a secure session, this protocol employs both hash and reverse hash algorithms. The suggested method is made new by incorporating deep learning techniques into the key transmission protocol in order to improve its security and efficiency. The study's findings show that our proposed protocol reduces process time, improves attack identification rate and reliability, and provides very strong security when compared to existing methods.

**28. A UNIQUE TECHNIQUE FOR ILLNESS STAGE
CATEGORIZATION USING LSTM WITH RULE
BASED FEATURE EXTRACTION**

Pasham Mamatha, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Home items utilize a large amount of energy in addition to the energy consumed for domestic air conditioning systems. Appliance energy consumption is greatly influenced by the operations of the building's inhabitants. This work analyses the power consuming rates of each appliance to assess occupant behavior. To begin, micro characteristics from power data are extracted using an association rule based model. The LSTM approach then performs classification in two levels depending on the retrieved characteristics. The first level categorization divides occupant feelings into six categories: cheerful, aggression, fear, tranquilly, loneliness, and demoralize. The phases of sickness that the occupant suffers are the next level categorization results. Pre-training the LSTM model improves the model's classification accuracy higher. Moreover, the suggested model's classification accuracy is compared to previous studies and assessed in terms of ROC and F1 score.

**29. A SMART REPRESENTATION OF MEDICAL RECORD
ANALYSIS USING FP MECHANISM**

Pooja Vitthal Rao Padhe, Assistant Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

The medical sector's performance is noteworthy since it is regarded a vital aspect of the contemporary economy. In order to preserve a healthy environment and a productive economy, medicine must be thoroughly researched and analyzed. This research utilized Big Data Analytics to analyze a medical database in order to collect information on a hospital's performance and show it as a word cloud. In addition, utilizing Particle Swarm Optimization Frequent Pattern, an Enhanced FP approach is presented to analyze the score for the hospital's working. For extremely accurate output, a score concept has been incorporated to the categorization process. The comparative findings reveal that the suggested approach is more efficient in terms of model complexity and computing time than the current DFAC-FFP and Associative Classifier techniques. In the proposed work, memory use is also lowered, and the user interface is greatly improved.

**30. SKIN DISEASE COHERENCE DETECTION USING
ENHANCED NAÏVE BAYES ALGORITHM**

Radhika Goli, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

The most common cause of death in today's globe is skin disease which will lead to skin cancer. Forecasting dermatology disease has become a difficult issue when examining clinical data. Deep Learning (DL) is particularly effective for better decision making and prediction of health-related data. Existing methods rely only on deep learning and machine learning to forecast dermatology disease. A unique approach called Embellished Naïve Bayes (E-NB) algorithm was introduced in this research with the goal of predicting the likelihood of skin disease from scalp illness. To determine the severity degree of the sickness in E-NB, a new layer called precise layer was added. This allows clinicians to move more swiftly through the therapy process for their patients. To avoid the problem of overfitting, dropout has been introduced to NB. In this study, DenseNet is employed to prevent the neural network from losing its gradient. This is the first study that we are aware of that uses scalp illness to predict the likelihood and coherence rate of skin disease. The proposed work shows high accuracy when compared with other algorithms.

**31. CONDITIONAL RANDOM FIELD BASED PREDICTION
OF POWER DISTRIBUTION SYSTEM WITH DEEP
LEARNING APPROACH**

S P Roja Rani, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Electrical load forecasting becomes an effective method which can improve the electrical generation and distribution companies' productivity and revenues. It assists them to manage their resources to deliver the energy depending on the consumption of consumers. Although many forecasting methods were developed, no generalized technique exists for all demand patterns. To address the challenge in electricity consumption (EC) prediction, CRF based power consumption prediction technique (CRF-PCP) is proposed. Convolution neural network (CNN) along with the conditional random field (CRF) are used to train and predict the EC of the areas in the region. The data is predicted in the cloud and transmitted to the power distribution system. Further, the forecasting of electricity consumption using CNN with Deep CRF produce results with 98.9% accuracy and less run time when compared to state- of-the- art algorithms like SVM, complex tree and decision tree. As we know, this is the first work to use CNN and CRF technique for power consumption prediction. This work demonstrates the efficiency of proposed work by accurately predicting the electricity consumption by consumers in India during 2020 to 2021. The final output reveals that high performance was achieved when applying the algorithms and methods.

**32. RANKED KEYWORD SEARCH FOR ACHIEVE PRIVACY
PRESERVING IN CLOUD ENVIRONMENT
BY EDGE COMPUTING**

Saritha Banoth, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Data outsourcing to an edge node with retaining privacy and security is a challenge. As a result, data encryption is essential to protect data from security risks. In this paper, ranked keyword search scheme along with proxy re-encryption scheme is used for protective privacy of user data in cloud along with the edge devices. This allows the owner to encrypt content using a secret key and the user to browse for content with ranked keywords. Only authorized users are allowed to access the relevant contents once the content has been re-encrypted with a new key. In this work, a local filter is utilized to record previously searched content in order to minimize search time and enhance search efficiency. As a consequence, excellent privacy in the cloud is achieved with efficiency in this study.

33. DEMING REGRESSION FEATURE SELECTED MODEST ADAPTIVE BOOSTING DATA CLASSIFICATION FOR TRAFFIC PREDICTION IN CELLULAR NETWORKS WITH BIG DATA

Sathish Vemula, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Traffic prediction in cellular networks is a key problem to be solved for providing good quality of services. Few research works have been designed in existing works to forecast the traffic using different classification techniques. During the classification process, the error rate was not minimal. So, the accurate classification performance was not effective level and failed to achieve higher traffic prediction accuracy. In order to enhance traffic prediction performance in cellular networks with lesser time consumption, a Deming Regression Feature Selected Modest Adaptive Boosting Data Classification (DRFSMABDC) Method is proposed in this paper. DRFSMABDC Method performs three operations, namely data collection, feature selection, and classification. DRFSMABDC Method collects the Spatio-temporal data from the input dataset. After that, Deming Regression-based Feature Selection (DR-FS) is carried out in DRFSMABDC Method to select the relevant features from the input dataset for performing the data classification. After feature selection, Modest Adaptive Boosting Data Classifier (MABDC) algorithm is employed to predict the cellular network traffic with higher accuracy and lesser time consumption. Modest Adaptive Boosting Data Classifier is an ensemble of several weak classifiers (i.e., Relevance Vector Machine). Then, all weak classifiers are combined in the MABDC algorithm to form a strong classifier and provide the final prediction results as normal network traffic or heavy network traffic with higher accuracy. Experimental evaluation of the DRFSMABDC Method is carried out using factors such as prediction accuracy, prediction time, and space occupation with respect to number Spatio-temporal data.

**34. AN ENHANCED GENERATIVE ADVERSARIAL NETWORK
FOR UNMANNED AIR VEHICLES ANOMALY
IDENTIFICATION**

Sowjanya Reddy Mallreddy, Associate Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Unmanned Air Vehicles have the potential to alter our daily lives by easing the strain on pilots and reducing crash risk through more thorough control. Despite the fact that architecture and automation are seen to offer several benefits, they may pose stability, safety, and secrecy risks. The attackers try to break into and take control of sensitive data, which might lead to serious security problems. Existing security systems are focused on ML-based identification for UAV. These algorithms, however, are unable to accurately determine the crime when given enormous volumes of data. The enhanced Generative Adversarial Network (E-GAN), a deep learning-based model, has been proposed as a solution to this problem. This E-GAN method employs specially trained individuals to extract characteristics and detect abnormalities in UAV movements. Furthermore, the suggested E-GAN uses an optimizer and the tanh function to boost accuracy. The experimental findings show that the suggested model, which uses a deep learning approach to identify abnormalities in UAVs, is successful.

**35. SKIN DISEASE ANALYSIS USING LSTM NEURAL
NETWORK WITH FEATURE SELECTION**

Sridhar Ambala, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

The technique of analyzing symptoms in the human body is known as skin analysis. Skin illnesses may be examined early with the use of the fastest-growing technology, allowing those who are suffering from skin ailments to receive care. Enhanced Long Short Term Memory with Feature Importance Selection is presented in this research. With the use of sensors, skin problems can be diagnosed. The IMU sensor is utilized for this, which is a low-cost sensor that combines several sensors such as accelerometer, gyroscope, and magnetometer. The dermatological dataset is being utilized to investigate the skin issue. Using the feature selection approach, the data from this dataset is analyzed to eliminate the unnecessary and noisy data. The system is built with a set of optimum features, which decreases the amount of time it takes to train it. With the best accuracy and minimal computing time, the suggested technique successfully predicts and diagnoses diseases. The findings of the experiment are compared to those of other machine learning methods.

36. MACHINE LEARNING ENABLED FUTURE OF EDUCATION SYSTEM

Vaddepally Santhosh, Assistant Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

This work addressed the problem of higher education and lack of skill during interviews, behavior patterns, reducing the stress and mental health by the fourth industrial revolution for the educational system. Internet of Things, Artificial Intelligence, Virtual and Augmented Reality, and Robotics are some of the popular technologies employed in the fourth industrial revolution. In this proposed work, combining the Virtual Reality and eye-tracking technology is used to analyze the stress level, mental health, interest of the student. Eye-tracking is used as a biometric, easy to handle student profile management is proposed in this work. This technology is used to determining the level of presence, attention of each virtual environment, focusing on a student during class hours. Virtual reality is used to improving the soft skills, social skills and personality development of a student. In virtual reality group-based or multiple users' one of the obstacles in it. Virtual reality is a unique training method, practical learning and doing. It offers high-quality training and reduces the cost (faculty, time, travel). It makes more privacy and removing the fear of personal judgment about others. Virtual relaxation training is introduced to reduce the mental psychotic behavior and isolated person and improving humanity level, mannerism, personality behavior and detecting the hidden interest in various domains which will be useful for the professional life of the student. This training will provide to the student based on week session and it is given as baseline treatment for psychotic disorder person.

37. ENHANCED LSTM WITH FEATURE SELECTION FOR PLANT DISEASE CLASSIFICATION

Varikuppala Ganesh, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Illness control procedures can be a waste of time and money if the disease and the disease-causing agent are not properly identified. This can lead to further plant losses. As a result, proper illness diagnosis is critical. Plant pathologists frequently have to depend on symptoms to diagnose a disease. Thanks to significant technical improvements and the employment of various classification approaches, plant disease prediction classification has become increasingly forecast and effective in recent years. The identification of plant diseases is presented in this work utilizing Enhanced Long-Short Term Memory, which is one of the finest deep learning algorithms for categorization. With the help of the E-LSTM, the informative plant data is used to analyze and classify the plant disease. There are three steps to the proposed work. Data preparation is the first step in the process, and it prepares the dataset for categorization. Furthermore, the recursive feature reduction technique is used to reduce ten critical properties that are important in prediction. The E-LSTM performs the classification step at the end. It is made up of five layers. The suggested method's performance is compared to that of current methodologies in order to measure its classification accuracy.

38. TWITTER SENTIMENT ANALYSIS USING CONDITIONAL GENERATIVE ADVERSARIAL NETWORK

Veeraganti Soumya, Associate Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Sentiment classification has become one of the most exciting study issues in the field of natural language processing, aiming to extract data from textual data expressing people's ideas or attitudes about a certain problem, thanks to the growth of social media. Twitter is a social media platform with a large number of users who use it to share their thoughts and views in a brief and easy-to-understand manner. Due to the prevalence of slang phrases and incorrect typos in a short sentence form, Twitter analysis of the data is more complex than other social media site data analytics. Automatic selection of characteristics has certain downsides, such as being computationally expensive and costing more as the number of characteristics grows. To overcome these challenges, deep learning is utilized, which is self-taught and more efficient in processing this sort of huge data. This paper introduces the Conditional Generative Adversarial Network for sentiment classification of Twitter data. To retrieve features from Twitter data, convolutional neural networks are employed. In terms of accuracy, precision, recall, and f1 score, the proposed work's performance is compared to that of previous works. The suggested method classifies the data with a 92.8 percent accuracy.

**39. ASSOCIATION RULE BASED PREDICTION OF POWER
DISTRIBUTION MODEL WITH MACHINE
LEARNING TECHNIQUE**

Vijay Koraveni, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Power demand forecasting has shown to be an efficient strategy for increasing the productivity and profits of electrical production and distribution firms. It aids them in managing their resources in order to supply energy based on consumer demand. Despite the fact that various forecasting techniques have been created, there is no one-size-fits-all solution for all demand patterns. AR-ECP, an AR-based electricity consumption prediction approach, is presented to solve the difficulty of electricity usage prediction. The association rule (AR) and the logistic regression method are only used to teach and forecast the power usage of the places in the region. The information is forecasted on the cloud and sent to the electricity distribution system. This finding provides evidence the effectiveness of the planned effort by precisely forecasting power usage by Calcutta residents from 2018 to 2019. When the techniques and procedures were used, the final result revealed that great performance was attained.

**40. ENSURE HIGH PRIVACY IN CLOUD USING EDGE
COMPUTING WITH FUZZY KEYWORD SEARCH SCHEME**

VNS Manswini, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Outsource of data to an edge node with maintaining privacy and security is a difficult issue. As a result, encrypting data is required to safeguard data from security threats. In this paper, Fuzzy keyword search scheme along with proxy re-encryption scheme is used for protective privacy of user data in cloud along with the edge devices. This makes it easier for the owner to encrypt data using a private key and for the user to search for documents using fuzzy keywords. After the data has been re-encrypted with a new key, only authenticated users will be able to obtain the relevant documents. The suggested approach employs a time sealer to maintain the allocated time for each user on the cloud server. As a result, in this research, great privacy in the cloud is accomplished with efficiency.

41. SELECTION OF ROUTING PATH USING CLASSIFICATION TECHNIQUE BASED MACHINE LEARNING ALGORITHMS

Ambika Gannu, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

In order to deliver high-quality communications, path forecasting in cellular networks is a significant issue that must be solved. There are a few extant research publications that use various classification algorithms to forecast routing paths. Throughout the categorizing step, there was a high rate of errors. As a result, the right categorization performance was ineffectual, and there was no improvement in path forecast accuracy. This study proposes a feature importance-based selection procedure with a decision tree data classification approach to increase cellular network routing route forecasting accuracy while taking very little time. The suggested approach performs three processes: data collection, feature extraction, and classification. From the input dataset, the suggested approach collects various remotely sensed data. Following that, feature importance-based feature selection is employed in the proposed study to choose important characteristics from the input dataset for data classification. Following feature selection, a decision tree-based classification algorithm is utilized to predict cellular network routing patterns with more accuracy and in less time. Experimentally, the proposed approach is assessed using parameters such as forecast accuracy, prediction time, and space occupation in proportion to the amount of input data.

42. DETECTION OF ANOMALY FROM PEOPLE WALKING STYLE USING MODIFIED RECURRENT NEURAL NETWORK

Anil Moguram, Associate Professor, Department of Electronics
and Communications Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

A person's walking style is distinctive and difficult to duplicate. As a result, this might be a useful automatic detection system for any application that requires individual identification, such as access control or monitoring systems. Despite networking and automation are believed to have various advantages, they may also present security, stability, and confidentiality concerns. The attackers attempt to hack into and seize control of private data, which might result in major security issues. ML-based detection for walking style is the focus of traditional security systems. However, given large amounts of data, these models are unable to identify the assault correctly. To address this problem, the Modified Recurrent Neural Network (M-RNN), a deep learning-based model, has been suggested. This M-RNN approach uses specifically trained layers to extract features and identify anomalies in human walking style. In addition, for improved accuracy, the proposed M-RNN employs an Adam optimizer and sigmoid function. Furthermore, the suggested model's detection accuracy is compared to that of Isolation Forest and SVM, as well as confusion matrix, model loss, ROC, AUC, precision, and recall.

**43. DATA MINING TECHNIQUES WITH XGB FEATURE
SELECTION FOR CLASSIFICATION OF SKIN DISEASE**

Ballepu Naveen Kumar, Assistant Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Skin diseases are a major global health problem that affects a large number of people. Skin disease forecast categorization has been increasingly anticipated and successful in past few years, thanks to major technical developments and the use of multiple classification methodologies. This paper presents the diagnosis of skin disorders using Decision Tree with Association Rule Mining, one of the best data mining techniques for classification. The DT-AR is used to examine and categorize the skin disease using the useful dermatological data. The planned work consists of four phases. The initial phase in the process is data preparation, which qualifies the dataset for classification. In addition, the XGB feature selection approach is employed to eliminate 10 key attributes that are necessary for prediction. The categorization stage is completed by the DT-AR at the conclusion. To assess the proposed method's classification accuracy, its performance is compared to that of current data mining approaches.

**44. PRIVACY PRESERVING RE-ENCRYPTION AND EFFECTIVE
KEYWORD SEARCH OF CLOUD DATA USING EDGE
COMPUTING**

Bhookya Naveen, Assistant Professor, Department of Computer Science
and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Outsourcing the data to the edge node with privacy in a secured manner is a challenging task. So, encrypting data is necessary in order to protect data from security issues. In this paper, Attribute based conjunctive keyword search scheme along with proxy re-encryption scheme is used for preserving privacy of user data in cloud. This facilitates the owner to encrypt the data with private key and user to search document using conjunctive keyword. Only the authenticated users can get required documents after re-encryption of data with new key. In order to reduce search time and to improve search efficiency, local filter is used in this paper to record the previously searched documents. To maintain the allocation time for each user in cloud server, the proposed scheme uses time sealer. So, the high privacy in cloud is achieved with efficiency in this paper.

**45. DATA MINING TECHNIQUES WITH XGB FEATURE
SELECTION FOR ABNORMAL GAIT ANALYSIS**

Chebrole Santhi Swarupa, Associate Professor, Department of Electronics
and Communications Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Gait analysis is a technique for assessing a person's movement patterns. Gait abnormalities may be assessed early using the most cutting-edge technologies, allowing patients suffering from gait issues to undergo treatment. This study presents Modified Regression Analysis with XGB Feature Selection. Gait issues can be identified with the use of sensors. This is done via a gyroscope sensor, which is a low-cost sensor that integrates various sensors like an accelerometer and an IMU. The gait dataset is being used to look at the Gait issues. The data from this dataset is evaluated using the XGB feature selection technique to eliminate unwanted and noisy data. The system is designed with a set of optimal characteristics that reduce the amount of time required to train it. Performance evaluation metrics such as F1 score, precision, accuracy, and recall are used to evaluate the proposed system's performance. The suggested system outperformed existing state-of-the-art approaches in terms of performance.

46. RESOURCE UTILIZATION PREDICTION BY USING CONDITION RANDOM FIELD BASED SVM

Chintalakumar Shiva, Assistant Professor, Department of Computer Science and Engineering, Siddhartha Institute of Technology & Sciences, Narapally, Hyderabad, Telangana

Abstract

Resource utilization forecasting has shown to be a successful strategy for increasing resource utilization, as well as the production and profits of distribution organizations. It helps them improve their productivity so that they can offer resource based on users need. Considering the fact that various forecasting methodologies have been created, there is no another solution for all demand patterns. The CRF-RUP approach is developed to solve the difficulty of resource utilization prediction. The conditional random field (CRF) and the Support Vector Machine (SVM) are used to train and forecast the resource usage of the company's regions. Information is forecasted on the cloud and sent to the resource distribution system. Furthermore, when comparing to state-of-the-art algorithms like RNN, complex tree, and decision tree, resource use predictions using SVM with Deep CRF produces findings with 92.6 percent accuracy and less run time. As far as we know, this is the first study to employ SVM and CRF techniques to forecast resource use. When the techniques and methods utilized, the final output proved that fine effectiveness was accomplished.

47. COLLISION PREDICTION IN MOBILE AD-HOC NETWORK USING DEMING REGRESSION FEATURE SELECTION

Dr. Arun Prasath Raveendran, Professor, Department of Electronics
and Communications Engineering, Siddhartha Institute of Technology
& Sciences, Narapally, Hyderabad, Telangana

Abstract

Collision prediction in mobile ad-hoc networks is a critical issue that must be addressed in order to provide high-quality communications. Few existing research papers have been created to predict collisions using various categorization algorithms. The mistake rate throughout the categorization phase was not low. As a result, the correct classification performance was ineffective, and greater traffic forecast accuracy was not achieved. A Deming Regression Feature Selected XGBoost Data Classification Method is suggested in this study to improve collision predictive accuracy in ad-hoc networks while consuming less time. Data gathering, extraction of features, and classification are the three processes performed by the proposed technique. The proposed method gathers different spatial data from the input dataset. After that, in the suggested study, Deming Regression-based Feature Selection (DR-FS) is used to choose relevant features from the input dataset for data categorization. Following feature selection, the XGBoost Data Classifier method is used to accurately forecast ad-hoc network collisions in less time. The suggested technique is evaluated experimentally utilizing criteria such as forecast accuracy, prediction time, and space occupation in relation to the amount of input data.

48. ANOMALY DETECTION IN AUTONOMOUS VEHICLES USING MODIFIED CONVOLUTIONAL NEURAL NETWORK

Dr. G Dhanalakshmi, Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Autonomous Vehicles (AV) have the ability to transform our everyday lives by relieving drivers burden and lowering road collisions through more detailed regulation. While networking and automation are said to provide numerous benefits, they may also introduce issues in terms of invulnerability, stability, and confidentiality. The attackers try to hack and take the control of AV which can lead to serious safety threads. The Conventional security systems focus on ML based detection for AV. However, these models cannot accurately detect the attack for huge volume of data. To handle this issue, deep learning based model named Modified Convolutional Neural Network (M-CNN) is proposed. This M-CNN technique consists of specially trained layers for feature extraction and detection of anomaly in AV. Also, the proposed M-CNN uses an Adam optimizer and ReLU function for better accuracy. Furthermore, the detection accuracy of the proposed model is compared with Isolation Forest and SVM and also evaluated in terms of confusion matrix, model loss, ROC, AUC, precision and recall. The experimental results reveals that the proposed model, which employs a deep learning technique is successful in detecting anomalies in AV. Also, the proposed M-CNN with Adam optimizer is proved to attain 10% efficient than the existing systems.

**49. ABNORMAL GAIT ANALYSIS USING LSTM NEURAL
NETWORK WITH XGB FEATURE SELECTION**

Dr. Gopala Krishnan, Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Gait analysis is the process of evaluating the walking pattern of the human. With the help of fastest growing technologies gait can be analyzed early to help the persons who are suffered from the gait disorders. In this paper, Long Short Term Memory (LSTM) with XGB feature selection is proposed. Gait disorders are identified with the help of sensors. For this, the IMU sensor which is a low cost sensor with combination of various sensors like accelerometer, gyroscope, and magnetometer is used. The HuGaDB dataset is used to analyze the gait problem. The data from this dataset are processed to remove the irrelevant and noisy data with the XGB feature selection technique. The model is trained with the set of optimal features which reduces the training time. The proposed method accurately predicts and classifies the disorders with the highest accuracy and less computational time. The experimental outcome is compared to the results of other machine learning algorithms. The proposed system's performance is assessed using performance assessment measures such as F1 score, precision, accuracy, and recall. With greater performance the proposed system surpassed other state-of-the-art techniques.

50. DIAGNOSIS OF SKIN DISEASES USING LSTM WITH FEATURE SELECTION

Dr. Sudhagar Govinda Swamy, Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Skin disorders are a significant worldwide health issue that impact a lot of individuals. The advancement of dermatological predictive classification has been more and more predictive and accurate in recent years, thanks to rapid technological advancements and the use of diverse classification methodologies. In this work, diagnosis of skin diseases using Long-Short Term Memory (LSTM) is proposed which is one of the best deep learning techniques used for classification. Here, the informative Dermatology data is used to analysis and classify the skin disease with the help of the LSTM. The proposed work comprises of three steps. The procedure begins with data preprocessing, which prepares the dataset for classification. In addition, the recursive feature elimination approach is employed to eliminate 15 key characteristics that are crucial in prediction. Final step is classification which is performed by the LSTM. It consists of six layers. To assess the proposed method's classification accuracy, its performance is compared to that of existing approaches.

51. MODIFIED CODE DIVISION MULTIPLE ACCESS FOR COMMUNICATION OPTIMIZATION IN MANET

Fathima Zaheera, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

This research offers MCDMA, a modified CDMA-based cooperative Interior gateway protocol, in order to enhance the information exchange in mobile ad-hoc networks. When mobile phones need to send multi-hop messages over MCDMA, they pick relay nodes based on relative speeds and cache lengths. Nearby nodes can learn the cache lengths of the relay nodes by watching the transmitting messages, and they can assist in relay message transmission when their cache is idle or less. This study uses a three-dimensional linear function to examine the cache length of the nodes, assuming that the data arrives via a Poisson Point Process. The model findings suggest that MCDMA can lower the network's dropout rate and increase its throughput.

52. AN EFFICIENT AND FLEXIBLE MULTI SERVICES FOR INTERNET CUSTOMERS USING DVRP & DECISION TREE

Gattu Sandeep, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

We propose a novel multi infrastructure and multipath routing protocol in this work for providing convenient and efficient multi services via the Internet. A few strong routers, known as x-routers, gather multipoint information and execute multiple requests depending on the data acquired in the newly suggested multi infrastructure. The majority of multipoint operations are handled by the x-routers, whilst other devices in the network simply need to execute the minimal amount of routing operations. The x-routers are intended to effectively manage multiple several interactions at the same time. The Distance Vector Routing Protocol, a novel multi-path routing framework, creates a common multiple tree centered at the m-router for each class. The Decision Tree rule constraint technique is used in the x-router to estimate the multichannel tree, which dynamically generates a delay-constrained multiple tree while also minimizing the tree expense. To reduce communication cost, a particular type of self-routing message performs the actual creation of the multicast tree across the Network.

53. CLASSIFICATION STAGE OF COVID IN VIEW POINT OF HEART BEAT USING MACHINE LEARNING

Immadisetty Venkata Prakash, Associate Professor, Department of
Electronics and Communications Engineering, Siddhartha Institute of
Technology & Sciences, Narapally, Hyderabad, Telangana

Abstract

Machine learning has shown to be effective in diagnostic imaging, and in the aftermath of the latest COVID epidemic, some research has begun to look into machine learning-based methods for assisting in the identification of cardiac disorders. We provide a new completely documented collection of heart disease pictures gathered from different Australian hospitals, with annotations reflecting the symptoms of the condition at the picture, motion, and pixel levels. We offer various complex models based on this data that handle key tasks for the automatic detection of heart disease pictures. In specifically, we demonstrate a new deep network developed from Structural Converter Systems that predicts the illness count associated with an input frame while also providing weakly-supervised clinical artefact location. We also provide a new approach for efficient screen score consolidation at the multimedia level based on uninorms. Finally, we compare state-of-the-art complex models for calculating COVID imaging diagnostic pixel-level segmentations. Experiments on the presented dataset show good results for all of the tasks studied, opening the door for future ML-assisted COVID diagnosis from cardiac data study.

54. EFFICIENT SENTIMENT RECOGNITION USING THE PERCEPTRON CLASSIFIER

Kale Jyothi Jeevana, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Textual sentiment classification using an emotion dictionary frequently encounters issues such as the emotion dictionary not including enough keywords or omitting some field sympathy terms. Furthermore, because some multiple meanings sentiment words with positive thoughts, negative energy, and neutral exist, the orientation of the words could be adequately conveyed, reducing the accuracy of textual sentiment classification to some extent. An enlarged sentiment lexicon is built in this work. The extended emotion dictionary adds to the quality of sentiment classification by including basic sympathy terms, field sentiment phrases, and multiple meanings sentiment phrases. The perceptron classifier is used to detect where the multiple meanings sentiment phrase appears in the text. As a result, the sentiment value of the multiple meanings sentiment phrase in the field may be calculated. The sentiment of the content is obtained using the enhanced emotion dictionary and the defined sentiment rating criteria. The results of the experiments show that the suggested sentiment classification approach, which is based on an enlarged emotion dictionary, is feasible and accurate. The study is significant in terms of recognizing emotion in comment messages.

**55. PROTECT DATA SECURELY USING TWOFISH
ALGORITHM WITH KEY AGREEMENT**

Kesireddy Archana, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Triple Data encryption system enables a sender to safely transmit to any group of users, but they need the distribution of decryption keys by a trusted third party. Participant key agreement protocols allow a group of users to negotiate a common cryptographic keys over network systems, allowing only the participants to decrypt ciphertexts encrypted with the shared encryption key. However, a transmitter cannot prevent any specific participant from decrypting the encrypted messages. In this article, we use a hybrid primitive called Identity based broadcast encryption to connect these two ideas. A group of participants negotiates a shared public cryptographic keys while each participant retains a decryption key in this novel primitive. When a sender sees the open group cryptographic key, he might choose to decode only a subset of the participants. We propose a twofish system with brief ciphertexts based on this concept. Under the choice game theory condition of the system model, the system is shown to be entirely complicity. We introduce a novel complete telecast encryption technique that is of standalone importance. The complete trait has been demonstrated to be beneficial in the development of sophisticated protocols.

56. PREDICTION OF OBSTACLES IN USV TRAJECTORY USING GLOBAL POSITIONING SYSTEM

Kethavath Srilatha, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

While cruising along a pre-planned worldwide itinerary, unmanned surface vehicles may meet undiscovered shifting obstructions. For moving impediments, USVs must devise obstacle detection paths. The speed of moving objects is predicted and the probability of the prediction is estimated using an algorithm based on the global positioning system (GPS) and Time Division Multiple Access in this article. Obstacle elimination is achieved using a spatial point process approach. The spatial point process technique examines the USV's speed and the movable obstacles' estimated unclear speed vectors, then chooses a collision-free mobility for the USV and optimizes the optimal solution. In parallel to the spatial point process approach, the cumulative distribution function is taken into account to allow real movement of USVs. The experiments demonstrate that the prediction algorithm can accurately forecast the path of moving objects, and that the suggested technique may provide a USV trajectory that is collision free.

57. RECURRENT NEURAL NETWORK WITH APRIORI FOR OVERALL COVERAGE CLASSIFICATION

Kodi Rajesh, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

One of the most important objectives in data mining nowadays is to create accurate and compact classifiers for real-world applications. In this research, we offer a new strategy for reducing the amount of class rules created by traditional class apriori rule classifiers while retaining an accurate classification model equivalent to that provided by state-of-the-art classification methods. We present a novel recurrent neural network that picks "strong" rules depending on the learning set's total coverage. In comparison to standard classifiers, the suggested classifier generates much fewer rules on larger datasets while preserving classification accuracy. We also look at how the entire coverage of such classifiers affects their classification accuracy with Nave Bayes. Experiments on 10 real-world datasets from the UCIML repository showed that our technique was equivalent to 6 other well-known rule-based classification algorithms in terms of classification accuracy, number of classification rules, and other relevant measures like as precision, recall, and f-measure. Among all classification techniques, it had the second-highest accuracy percentage and the best performance in terms of average list of rules. Our strategy showed to produce compact and intelligible classifiers by thoroughly scanning the whole example space, although not attaining the greatest results in terms of classification accuracy.

58. AN EFFICIENT HEALTHCARE MONITORING SYSTEM FOR DIABETES PREDICTION USING EXTREME GRADIENT BOOSTING TECHNIQUE

M Vanish Sucharitha Santosh, Assistant Professor, Department of
Electronics and Communications Engineering, Siddhartha Institute of
Technology & Sciences, Narapally, Hyderabad, Telangana

Abstract

Human health issues must be closely examined and addressed with proper medications. Chronic illnesses such as diabetes, heart disease (HD), cancer, and chronic respiratory disease are the main causes of death worldwide. The previous 10 years have seen a lot of research into healthcare services and their technology advancements. To become more precise, the Internet of Things has shown promise in linking a wide range of medical equipment, detectors, and care providers in order to give incredibly high medical treatment at a distant location. Patient safety has increased, medical costs have fallen, healthcare services have become more accessible, and operational efficiency in the healthcare business has grown. In this paper, a diabetic patient monitoring strategy is proposed that uses an IoT-based machine learning method called eXtreme Gradient Boosting (XGB) to support in diabetes diagnosis and classification. A successful implementation of any classifier requires proper hyperparameter optimization. This work employed Bayesian optimization, which is a very effective method for hyper-parameter optimization, to optimize the hyper-parameters of XGBoost. The efficacy of the suggested method is assessed in terms of accuracy, specificity, sensitivity, and F1score. It outperforms better than the other existing algorithms.

**59. FOR SUPPORT VECTOR CLUSTERING AN ENHANCED
CLUSTER CLASSIFICATION METHOD**

Madipalli Sumalatha, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

For support vector clustering, we offer a novel efficient approach for handling the cluster identification issue. The proposed approach examines the architecture of the component that describes SVC cluster outlines and looks for interconnection pathways between crucial points that separate various cluster shapes. This method allows for the separation of distinct clusters and the assignment of every point to its proper one. The suggested algorithm incorporates a novel quick way for discovering and categorizing crucial spots as well as evaluating the patterns of interaction among them. Experiments show that the suggested technique considerably improves SVC classification accuracy in the presence of various form clusters while lowering time consumption by orders of magnitude compared to existing SVC labelling algorithms.

60. ENHANCED QUERY WORKING PLATFORM FOR FOG AND CLOUD ENVIRONMENT

Mamidi Ranjith Reddy, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Fog computing is mostly used to handle massive amounts of data generated by terminals. Because fog nodes are the nearest seekers to terminal gadgets, the collected information may be manipulated with or unlawfully acquired while being transported or aggregated. If some programs demand a real-time procedure with heavy security, the cloud service may take a sample of data from the fog service to verify the final findings. We present a safe data query architecture for cloud and fog technology in this study. When the fog network offers queried information to the user, we employ cloud platform to check the data. In the architecture, the cloud server assigns certain data gathering topology trees to the fog system, and the fog infrastructure may then collect relevant data from fog nodes using one of the pre-assigned data gathering trees. Certain fog devices are also designated as sampled nodes, which can return data to the cloud server. We assess the safety of our suggested scheme in light of fog computing's security needs. Our architecture not only ensures the accuracy of essential data, but also successfully defends it against malevolent users' man-in-the-middle attacks and collusion attacks. Experiments also indicate that our system is both reliable and successful.

**61. RELIABILITY AUDITING WITHOUT A TRUSTED
AUTHORITY USING A THRESHOLD ENCRYPTION
APPROACH**

Mohammed Moqueed Ahmed, Associate Professor, Department of
Electronics and Communications Engineering, Siddhartha Institute of
Technology & Sciences, Narapally, Hyderabad, Telangana

Abstract

Data providers are rapidly turning to cloud storage with sharing services. Users, on the other hand, have a tough time determining if cloud server suppliers secure their data. This work presents a novel threshold hybrid encrypting for authenticate approach without trusted center to check integrity of data and safeguard data and key confidentiality in the group. The suggested solution is based on the Triple Data Encryption Standard and twofish encryption algorithm, as well as Rivest Shamir Adleman secret sharing. This allows the key to be disseminated and controlled without the need for a trusted center, while maintaining the anonymity of the Triple data encryption key and the users' secret key. In addition, we create and implement a unique integrity auditing and re-signature mechanism that ensures data integrity and resolves the cloud and cancelled user collusion issue. The suggested approach achieves accuracy, safety, and effectiveness with minimal communication and computing costs, according to securing data and performance assessment.

62. EFFECTIVE AGE ESTIMATION FROM THE IMAGES USING LSTM

Muniyanaik Kethavath, Associate Professor, Department of Electronics
and Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

In the fields of human-computer communication and object tracking, age estimate from a solo facial image has been a critical challenge with a wide variety of practical application values. Existing approaches for age estimate of face photos in the wild have a low accuracy since they only consider global aspects while ignoring fine-grained characteristics of age-sensitive regions. We offer a unique technique for fine-grained age estimation in the field based on our modified long short-term memory network, which is inspired by fine-grained classifications and the visual recognition mechanism. This approach constructs ML-ResNets or ML-RoR networks by combining residual networks or residual networks of residual network models with LSTM units to extract local characteristics of age-sensitive areas, greatly improving the age estimate accuracy. We get our final prediction findings by mixing the global and local information.

**63. MAKE GOOD DECISION IN HIGHER STUDIES BASED ON
STUDENTS' PERFORMANCE USING ASSOCIATION
RULE MINING**

Nafiza Syed, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

To choose applicants who are suitable to accomplish well academically at higher education institutions, an entrance system based on accurate and trustworthy entrance requirements is critical. This research looks into how association rule mining might help colleges make better admissions decisions by predicting applicants' educational success at college. The suggested technique was validated using data from 1860 students enrolled in a Delhi public university's Mechanical department college from 2015 to 2018. The findings show that based on specific pre-admission characteristics, candidates' early college performance may be predicted before entrance. The findings also suggest that the Scholastic Achievement Admission Test score is the most reliable predictor of future performance of students among the pre-admission criteria. As a result, in admissions processes, this score should be considered more important. We also discovered that the Artificial Neural Network approach had a higher accuracy rate than the other categorization strategies we looked at, with a rate of over 69 percent.

64. CLASSIFYING THE BREAST CANCER IMAGES USING DEEP LEARNING METHOD WITH CLUSTERING TECHNIQUE

Narasimha Devani, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Breast cancer is a severe concern to women all over the world, and it is one of the foremost reasons of mortality in women. The diagnosis of cancer is mostly dependent on doctors and physicians analyzing digital biomedical photography, such as histopathology photographs. Analyzing histopathological pictures is a difficult undertaking, and conclusions based on these images almost always need expert knowledge. Computer Aided Detection approaches, on the other hand, can assist the doctor in making more dependable conclusions. For biological image processing, the advanced Convolutional Neural Network was recently presented. Each picture usually incorporates structural and statistical data. This research uses unique CNN approaches to categorize a series of biological breast cancer photos based on basic and analytical evidence extracted from the pictures. A Cnn Architecture, a Long-Short-Term Memory, and a hybrid of CNN and LSTM are suggested for breast cancer picture categorization. After feature extraction using the suggested new CNN models, Softmax and Support Vector clustering layers were applied for the decision-making step. The best Accuracy value, best Precision value, and best F-Measure value are attained in this experiment.

65. MODIFIED E-LSTM FOR CLASSIFYING THE PROTOCOLS USED FOR COMMUNICATION

Padala Pavan Kumar, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

People frequently don't know the specifications of an adversary wireless data transmission on the battlefield. As a result, we must employ electronic surveillance equipment to locate, collect, recognize, and analyze hostile wireless communication signals. The fascinating electronic surveillance technologies, on the other hand, can only identify signal layer properties like signal carrier frequency, and cannot gather any more data. We present a new network protocols classification technique based on increased long short-term memory and Restricted Boltzmann Machines to boost surveillance capability. The RBM is introduced initially, followed by a simulation of a network protocols categorization approach based on the RBM. We optimize the approach in order to enhance performance. First, we apply the E-LSTM to pre-process the data in order to retrieve the feature. The characteristic is then used as an RBM input to categorize the network protocols. Finally, we run simulations to test the suggested algorithm's efficacy. The suggested method performs quite well in classifying communication protocols, according to simulation findings.

**66. ROUTING PROTOCOLS FOR HIGH DATA
TRANSMISSION IN WIRELESS SENSOR NETWORK**

Pillalamarri Sreesrinivas, Assistant Professor, Department of Electronics
and Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

To improve data transmission in wireless sensor networks, this research proposes RIP-OSPF, an ensemble RIP-OSPF-based collaborative Border gateway protocol. Cell phones choose base stations depending on linear acceleration and queue sizes when sending number of messages through Routing Information Protocol and Open Shortest Path First. By observing the sending messages, adjacent devices may figure out how long the relay devices' queues are, and they can help with relay message delivery if their queue is idle or even less. The queue length of the end devices is investigated using a fast playing dimension non-linear function, considering that the data receives through a homogenous poison point process. According to the model's findings, RIP-OSPF can minimize the network's dropout rate while also increasing throughput.

**67. IMPROVE MULTIPLE SERVICES THROUGH FOG
ENVIRONMENT USING DIVIDE & CONQUER
ALGORITHM WITH APRIORI ALGORITHM**

Ramakrishna Pasula, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

In this paper, we present a unique multi-infrastructure and number of service provisioning method for delivering easy and efficient multiple services via the fog network. A few powerful rules, known as y-rules, collect multipoint data and execute many requests based on the data gathered in the newly proposed multi infrastructure. The y-rules handle the majority of multipoint actions, whereas other network devices just need to do the bare minimum of service provisioning tasks. The y-rules are designed to handle a large number of interactions at the same time. For each type of service, the Divide and conquer algorithm, an unique multiple service delivering architecture, produces a common set of multiple rules based on the y-rule. The y-rule employs the apriori rule constraint approach to predict numerous levels of restriction, dynamically generating a delay-constrained multiple level rule while reducing rule expenditure. A specific sort of service distribution message accomplishes the actual development of the various services over the fog Network to decrease communication costs.

68. USING CART TECHNIQUE FOR CLASSIFYING COVID IN TERMS OF CHEST PAIN PROBLEM

Ramesh Bhanothu, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Data mining has been demonstrated to be successful in diagnostic imaging, and some study has started to look into data mining-based approaches for helping in the diagnosis of chest pain symptoms in the aftermath of the recent COVID outbreak. At the image, action, and pixel regions, we give a new thoroughly documented set of chest pain data acquired from several China hospitals, with comments describing the symptoms of the ailment. We show a novel classifier created from a power electronic converter that predicts the disease frequency connected with an input sample while also locating clinical artefacts with little supervision. Finally, we compare state-of-the-art complex models for computing COVID imaging predictive pixel-level detections using state-of-the-art analytical models. Investigations on the submitted dataset indicate promising results for all of the tasks investigated, paving the way for future data mining-assisted COVID diagnosis using data on chest pain.

69. VISUAL IMAGERY TECHNIQUES FOR IMAGE SENTIMENT CLASSIFICATION

Ramesh Gugulothu, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

When employing an emotion picture set to classify image sentiment, problems arise regularly, such as the emotion image set not having enough visuals or lacking a field sympathy image. Additionally, because certain multiple visual sentiment images with sad, joyful, and neutral reactions could sufficiently express the orientation of the images, the accuracy of visual sentiment classification was reduced to some amount. This approach incorporates a more detailed visual emotion image categorization. Basic sympathy photos, field sentiment reaction, and multiple reactions sentiment images are included in the expanded emotion image set, which improves the quality of image sentiment categorization. To recognize where the numerous sensations exist in the image, the visual imagery approach is utilized. Using the augmented emotion picture collection and the stated expression rating criteria, the image's feelings are determined. Experiments reveal that the proposed visual sentiment classification technique, which is based on an expanded emotion picture collection, is viable and accurate.

**70. SECURE DATA TRANSMISSION IN CLOUD USING
IMPROVED PROPOSED ENCRYPTION STANDARD**

Shirisha Munasa D, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

A transmitter may safely communicate to any community of participants using the Double Data encryption technology, but they'll require a certificate authority to provide decryption keys. Just the participants may decrypt ciphertexts encrypted with the mutual encryption key, thanks to General Key protocols, which allow a number of participants to exchange a shared cryptographic key across network systems. A transmitter, on the other hand, cannot prohibit any particular participant from decoding the encrypted communications. To link these two approaches, we develop a hybrid peculiar termed enhanced suggested encryption standard in this work. In this unique primal, a number of participants interacts a common public cryptographic key whereas each person keeps a decryption key. Whenever a transmitter receives the open shared cryptographic key, he may decide to selectively decode a portion of the members. Depending on this approach, we present an enhanced suggested encryption standard system with short ciphertexts. The system is proven to be totally complicity under the choice cooperative game theory criterion of the framework. The entire feature has been shown to be advantageous in the construction of complex protocols.

71. EFFICIENT AND SMOOTH PATH FOR USV USING LASSO REGRESSION TECHNIQUE

Srinivas Gadari, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Unmanned surface vehicles may encounter unexpected altering impediments while sailing across a pre-planned global path. USVs must create obstacle avoidance pathways for moving obstructions. This article uses an algorithm based on the Lasso Regression and Reinforcement Learning process to anticipate the velocity of moving objects and measure the likelihood of the forecast. A multidimensional space process technique is used to eliminate obstacles. The multidimensional space process approach looks at the velocity of the USV and the expected unclear velocity vectors of the moveable impediments, then picks a traffic free motion for the USV and improves the best solution. To enable genuine mobility of USVs, the summation is taken into account in addition to the multidimensional space process technique. The results show that the detection technique can properly anticipate the route of moving objects, and that the recommended approach might result in a traffic free USV path.

72. HEALTH POLICIES CLASSIFICATION USING A LEARNING VECTOR QUANTIZATION WITH CBP

Valiki Vijayabhaser, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Creating effective and concise classifiers for practical uses like health policy is one of the most significant goals in machine learning presently. We propose a new technique for lowering the number of criteria developed by classical learning vector quantization while maintaining an excellent classifier model comparable to that offered by state-of-the-art classifiers in this paper. We describe a unique content-based procedure that selects "powerful" constraints regarding the health policies of the learning set. The proposed classifier produces many fewer restrictions on bigger datasets than typical classifiers while maintaining classification performance. With Gaussian, we also examine at how the coverage in general of such classifiers influences their accuracy of classification. It got the foremost accuracy Rate and the best results in terms of minimum set of rules between all categorization approaches.

**73. EFFECTIVE DIET PLAN MONITORING FOR CANCER
PATIENTS USING MODIFIED MULTILAYER PERCEPTRON**

Venkatesh Thota, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

Human health problems must be thoroughly investigated and treated with a healthy food plan. The leading causes of mortality globally include chronic diseases such as diabetes, heart disease, and cancer. There has been a lot of study into healthcare services and technological developments during the last 12 years. To be more specific, cloud services have showed promise in connecting a variety of medical equipment, detectors, and care providers in order to deliver exceptionally high diet plans from afar. Patient care has improved, medical expenditures have decreased, diet plan services have been more accessible, and the healthcare industry's operational efficiency has increased. A cancer patient diet plan monitoring technique is given in this research, which employs a Multilayer Perceptron classifier to aid in the monitoring of the right diet plan for cancer patients. Any classifier's implementation will be successful if the hyper-parameters are optimized properly. It outperforms all other algorithms currently in use.

**74. DETECTION AND CLASSIFICATION OF NODES IN MANET
USING MODIFIED SVM**

Vijayapuram Keerthi, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

We propose a unique efficient strategy for dealing with the node identification issue in MANETs by categorizing nodes based on energy. The suggested method looks at the design of the module that provides node attributes and searches for connecting paths between critical mobile nodes that segregate nodes depending on energy. This strategy allows for the classification of different mobile nodes as well as the allocation of each device to the appropriate one. The proposed approach includes a unique fast method for locating and classifying critical nodes, as well as assessing their energy levels. Experiments reveal that, when compared to existing SVM labelling algorithms, the proposed approach significantly improves SVM accuracy of classification in the existence of varied energy level nodes while reducing process time by orders of magnitude.

75. INSTAGRAM COMMENTS ANALYSIS FOR GET POPULAR USING TEXT MINING TECHNIQUE

Anagandula Naresh, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

In recent years, Instagram has become the most popular platform. Because Instagram is the most user-friendly application, the collected data and posts may be tampered with or illegally obtained while being transmitted or consolidated. If some instagram ids need a real-time, high-security method, the cloud service may collect a piece of information from the instagram app to validate the person's credentials. In this paper, we provide a secure text mining architecture for instagram comment analysis technologies. We utilize the Instagram program to verify the remark of the post when the application presents tag and text information to the user. The server gives a specific data collecting topology to the Instagram posts in the framework, and the platform may then gather necessary data from the server using one of the pre-assigned information gathering techniques. Experiments show that our technique is both dependable and effective.

**76. SECURE DATA TRANSMISSION IN CLOUD USING HIGH
SAFE SECURITY TECHNIQUES BY REMOVING
INTERMEDIATE AUTHORITY**

Bomma Gopi, Assistant Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

With sharing services, data producers are increasingly moving to cloud storage. Clients, on the other side, have a difficult time deciding if cloud server providers protect their information. This paper provides a unique criterion blended encrypting for authenticating without an authorized center in order to assess data integrity and protect data and key secrecy in a group. The Blowfish and MD5 encryption algorithms, as well as verified secret sharing, are used in the proposed method. This eliminates the requirement for an intermediary center and permits the key to be distributed and managed while keeping the blowfish encryption key and the users' secret key's confidentiality. Furthermore, we design and implement a one-of-a-kind authenticity auditing and re-monogram system that maintains data consistency while also resolving the cloud and rejected user conspiracy issue. According to data security and performance evaluation, the recommended technique delivers accuracy, safety, and efficacy with low communication and computation expenses.

77. MODIFIED DEEP BELIEF NETWORKS FOR GENDER ESTIMATION

Donthi Naveen Kumar, Associate Professor, Department of Electrical and Electronics Engineering, Siddhartha Institute of Technology & Sciences, Narapally, Hyderabad, Telangana

Abstract

Gender estimation from a single face picture has been a crucial task in the disciplines of humans and technology interactions and object recognition, with a wide range of practical implementation values. Existing algorithms for estimating gender in face pictures in the natural have limited performance since they only evaluate global factors while disregarding perfectly alright gender sensitive area attributes. Based on our modified deep belief network, which is motivated by detailed and nuanced classifications and the object recognition process, we present a new approach for fine granular gender prediction in the environment. This method creates MD-QualNets networks by merging QualNet and DBN units to extract local features of gender sensitive regions, which considerably improves gender estimation accuracy. We arrive at our final forecast results by combining global and local data.

**78. SELECT PERFECT EMPLOYEE BASED ON ACADEMIC
PERFORMANCE USING MACHINE LEARNING ALGORITHM**

Dr. Manianayya Krishnan, Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

An entry interview method depends on reliable and honest entry standards is crucial for selecting applicants who are capable of achieving the company's goals. This study investigates how machine learning techniques might aid Human Resources in making better appointment selections by predicting candidates' college progress. Data from 1860 job seekers enrolled in a Delhi job fair from 2016 to 2017 was used to validate the recommended approach. The findings suggest that applicants' early academic success may be predicted before entering based on key selection features. The data also reveal that many of the eligibility criteria, the Intellectual Ability Selection Test score is the most accurate predictor of a candidate's future success. As a result, this score should be given higher weight in selection procedures. We also noticed that the Reinforcement learning strategy, with an accuracy rate of over 89 percent, outperformed the other classification algorithms we looked at.

**79. KIDNEY CANCER IMAGE CLASSIFICATION USING CNN
WITH DATA MINING METHOD**

Dr. Mohd Abdulkareem, Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Kidney cancer is a serious worry for people all around the world, and it is one of the leading causes of death in people. Doctors and clinicians evaluating digital biomedical photography are mostly responsible for diagnosing kidney cancer. Analyzing tissue samples is a challenging task, and drawing conclusions from them nearly always necessitates specialist expertise. The improved Convolutional Neural Network was recently introduced for biological image recognition. In most cases, structural and analytical data are included in each image. This study employs novel CNN algorithms to classify a set of biological kidney cancer photographs using fundamental and analytical data derived from the images. For Kidney cancer image classification, a CNN Architecture, an XGBoost, and an ensemble CNN and XGBoost are recommended. The decision-making process was completed after feature extraction utilizing the recommended updated CNN models and Decision Tree. This experiment yielded the best Accuracy, Precision, and F-Measure values.

8o. CLUSTERING THE NETWORK SECURITY PROTOCOLS FOR HIGH SECURITY IN WAR ENVIRONMENT

Dr. S F Kodad, Professor, Department of Electrical and Electronics
Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

On the warfare, people usually don't know the specs of an enemy's wireless data transfer. As a result, automated tracking devices must be used to find, collect, detect, and analyze threatening mobile communication signals. On the other extreme, the intriguing mass surveillance systems can only detect signal layer parameters like signal bandwidth and cannot collect any more information. To improve surveillance capabilities, we introduce a new network security protocol classification approach based on the support vector clustering algorithm and Deep Belief Networks. The DBN is first presented, then by a simulations of a DBN-based network security protocol segmentation technique. In order to improve effectiveness, we maximize the technique. In order to obtain the attribute, we first use support vector clustering to clean the data. After that, the attribute is employed as a DBN input to classify network protocols. As per simulation results, the proposed technique does a good job of recognizing network security protocols.

81. OPTIMIZING THE COMMUNICATION IN VANET USING MACHINE LEARNING TECHNIQUES

Dr. Sujoy Bhattacharya, Professor, Department of Electrical and Electronics Engineering, Siddhartha Institute of Technology & Sciences, Narapally, Hyderabad, Telangana

Abstract

This study presents GBA-ABA, a cooperative external gateway protocol founded on an upgraded mix of Gradient Boosting Algorithm and AdaBoosting Algorithm, to increase data communication in vehicle ad-hoc networks. When transmitting a large volume of information using Gradient Boosting Algorithm and AdaBoosting Algorithm, vehicles select ground stations based on linear velocity and queue sizes. Adjacent vehicles may be able to determine how lengthy the relay receivers' queues are by seeing the sending information, and they may be able to assist with relay information transmission if their queue is empty or even shorter. The waiting length of end systems is studied using a static dimension sigmoid activation function, with data arriving via a homogeneous poisson point process. GBA-ABA, according to the model's findings, can reduce network dropout rates while also expanding performance.

82. CLASSIFYING THE MULTIPLE CLOUD SERVICES USING THE MACHINE LEARNING TECHNIQUES

Ganesh Nomula, Associate Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

We provide a novel multi-infrastructure in this research, as well as a classification system for services based on public demand. It's a mechanism for delivering various services across a cloud network in a simple and effective manner. A few strong classes of service, known as n-classes, collect multipoint data and perform multiple requests depending on it in the newly suggested multi infrastructure. Other network devices just need to conduct the basic necessities of service provisioning duties, while the n-classes handle the majority of multipoint operations. The n-classes were created to manage a high number of classifications at once. The Random Forest method, a unique service classification architecture, generates a common set of numerous rules based on the n-class for each type of service. The n-class uses a particle swarm optimization technique to anticipate a wide variety of classes, dynamically producing a delay-constrained multiple level rule while lowering rule expense. A special type of service categorization message facilitates the real development of multiple services over the cloud network in order to boost service provisioning.

83. USER DATAGRAM PROTOCOL FOR IDENTIFYING THE CORONA BY HEADACHE PROBLEM

Kalwala Srinivas, Associate Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Protocols have been shown to be effective in diagnostic datasets, and some research has recently been looking into protocol-based ways for assisting in the diagnosis of headache symptoms in the wake of the current Corona epidemic. We provide a fresh completely documented collection of headache data obtained from different Delhi hospitals, together with comments detailing the ailment's signs at the dataset, treatment, and symptoms value. We demonstrate a new classifier built from a matrix converter that predicts the illness frequency associated with an input sample while also finding clinical objects with little guidance. We also present a novel technique based on uniforms for consolidated screen scores at the content creation level. Moreover, we evaluate state-of-the-art complicated models with state-of-the-art protocol models in order to compute Corona illness predicting symptoms value level detections. Investigations of the supplied dataset reveal positive results for all of the tasks examined, opening the door for future protocol assisted Corona diagnosis using headache data.

**84. AN ENHANCED NATURAL LANGUAGE PROCESSING
FOR AUDIO SENTIMENT ANALYSIS**

Kommidi Vani, Assistant Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

When using an emotion audio collection to categorize speech sentiment, issues like as a shortage of recorders or a field sympathy dialogue emerge frequently. Furthermore, the accuracy of audio sentiment classification was degraded to some extent because some multiple audio sentiment recorders with sad, joyous, and threatening speech could adequately reflect the orientation of the recorders. This method includes a more thorough classification of auditory emotions. The enlarged emotion audio recorder set includes basic compassion audios, field audio recognition, and multiple speech sentiment recorders, which increases speech classification quality. The natural language processing technique is used to determine where the various feelings reside in the audio. The audio's sentiments are determined using the improved emotion audio collection and the provided speech grade standards. Experiments show that the suggested audio sentiment categorization approach, which is dependent on a larger collection of emotion audio, is both practical and accurate.

**85. HIGH SECURITY FOR CONFIDENTIAL DATA IN
CLOUD COMPUTING USING HASH BASED
AUTHENTICATION CODE**

Palvai Pravalika, Assistant Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

A Dual Data encryption system allows a sender to securely interact with any number of users, but decryption keys must be provided by a certificate authority. Due to hash characteristics, which enable a group of participants to transmit a shared secret keys over network systems, only the members may decipher ciphertexts encoded with the master encryption key. A sender, on the other side, cannot prevent any individual from deciphering the encrypted messages. In this paper, we build a unique hash-based authentication code to connect various techniques. A number of people communicate using a shared public cryptographic key in this one-of-a-kind primal, while each person holds a secondary secret key. When a sender obtains the open shared secret keys, he can choose to decode a section of the members randomly. We provide a hash-based authentication code with small ciphertexts based on this method. The full functionality has been demonstrated to be useful in the development of complicated procedures.

**86. AN ENHANCED RIDGE REGRESSION WITH LDA FOR
EFFECTIVE PATH IDENTIFICATION OF UAV**

Paravasthu Varunkrishna, Associate Professor, Department of Electrical and Electronics Engineering, Siddhartha Institute of Technology & Sciences, Narapally, Hyderabad, Telangana

Abstract

When flying through a pre-planned international route, unmanned air vehicles may meet unanticipated changing barriers. For shifting barriers, UAVs must build collision avoidance paths. To predict the motion of moving objects and quantify the possibility of the prediction, this article employs an algorithm based on Ridge Regression and Linear Discriminant Analysis. To remove obstructions, a multifunctional spatial process approach is applied. The multifunctional spatial process technique considers the UAV's motion as well as the movable obstructions' predicted unclear angular velocity, then chooses a traffic-free motion for the UAV and develops the best solution. In order for UAVs to have true mobility, the accumulation approach is used in addition to the multifunctional spatial process technique. The findings suggest that the detection method can accurately predict the route of moving items, and that the proposed strategy might result in a UAV route that is free of traffic.

**87. A RANDOM FOREST WITH WEIGHTED
ASSOCIATION RULES FOR CLASSIFY EDUCATION POLICY**

Patlolla Rushikesh Rao, Associate Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

One of the most important tasks in machine learning right now is to create effective and succinct classifiers for practical applications such as education policy. In this research, we suggest a new approach for reducing the amount of policies created by traditional weighted association rules while keeping an outstanding classifier model equivalent to state-of-the-art classifications. A Random Forest technique is described that picks "good" policies for the learning set's education policies. Investigations on ten real-world datasets from the UCIML data base revealed that our method was comparable to six several well principle classification techniques in classification performance, number of classifiers, and other relating metrics like precision, recall, and f-measure.

88. CONTINUOUS AND EFFECTIVE TRACKING OF E-COMMERCE MARKET SHARE USING ARTIFICIAL NEURAL NETWORK

Rachakonda Neeraja, Assistant Professor, Department of Electrical and Electronics Engineering, Siddhartha Institute of Technology & Sciences, Narapally, Hyderabad, Telangana

Abstract

Market share monitoring issues in e-commerce must be properly studied and managed with a well-thought-out strategy. Share market crashes, in which shares reach high levels, sometimes lose value, and sometimes remain in a neutral position, are among the major causes of mortality worldwide. During the previous ten years, there has been a lot of research into e-commerce services and technology advancements. To be more particular, e-commerce services have shown potential in combining a range of share tracking approaches, identify procedures, and suggestion providers to give extraordinarily high investment plans from afar. Shareholder attention has strengthened, loss rates have fallen, e-commerce services have become more affordable, and the effectiveness of the investment process has risen. This study uses an Artificial Neural Network to help in the assessment of the best stock market investment strategy for shareholders. The properties of AdaBoost were optimized using stochastic optimization, which is a particularly successful approach for parameter optimization. The correctness, validity, sensitivity, and F1score of the proposed approach are all evaluated.

**89. DETECTING ABNORMAL ACTIVITY OF USV USING
ENHANCED CLUSTERING METHOD**

Srujana Yadav Choppari, Assistant Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

We offer a novel and efficient technique for detecting aberrant activity in FANETs by classifying USV based on activities. The proposed technique examines the architecture of the module that detects USV behavior and seeks for linking pathways between essential Unmanned Surface Vehicles that separate vehicles based on aberrant behavior. This technique facilitates the detection of various vehicles as well as the categorization of each vehicle into its suitable category. A new rapid technique for identifying and classifying vital vehicles, and also analyzing their actions, is included in the suggested strategy. Results demonstrate that, particularly compared to existing fuzzy clustering labelling methods, the proposed methodology greatly improves fuzzy clustering accuracy rate in the presence of many activities while lowering time taken by orders of magnitude.

**90. EFFECTIVE SEARCH PROCESS IN CRICKET SCORE
REPORT USING MODIFIED QUERY PLATFORM**

T Sowmya, Assistant Professor, Department of Electrical and Electronics
Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Cricket has been the most popular and well-liked sport in recent years. Cricket is the wildest game, thus the score data is delivered or aggregated at the start of each game session. If a score report is required for player selection on occasion, the committee may collect all information from the team to authenticate the player's capability using a high-security manner. We present a safe and improved query framework for cricket score report analysis technologies in this study. When it comes to matchmaking, player selection, and team building, we use the cricket report to check a player's abilities. The report specifies a data analysis for all players, and the framework may then use one of the information collecting approaches to obtain the necessary data from the report. Some reports are also labelled as sampled documents, meaning they can send data back to the server. In light of computing's security requirements, we evaluate the safety of our proposed approach. Our design not only maintains the correctness of critical data, but also protects it against malicious users' man-in-the-middle and collusion assaults.

**91. GOOD AND SMOOTH DATA EXCHANGE IN FOG
COMPUTING ENVIRONMENT USING IDEA AND
HMAC TECHNIQUES**

Dr. Velusamy Raja Kumareshwaran, Professor, Department of Computer
Science and Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangan

Abstract

Producers of data are increasingly using cloud computing due to sharing platforms. Clients, on the other hand, have a hard time determining if cloud service providers safeguard their data. In order to examine integrity of the information and secure data and key concealment in a group, this study proposes a unique criteria mixed encrypting for authentication without an authorized center. The suggested solution employs the International Data Encryption Algorithm, as well as Hash-based Message Authentication Code encryption methods and trivial secret key exchange. This minimizes the need for a middle center and allows the key to be disseminated and controlled while maintaining the confidentiality of the IDEA cryptography key and the users' private keys. In addition, we formulate and develop a one-of-a-kind sincerity monitoring and re-monogram process that guarantees data accuracy while also addressing the cloud and prohibited user conspiracy issues. The proposed approach, according to data scalability and reliability evaluations, provides accuracy, protection, and performance with low communication and computing costs.

**92. RESNET WITH DATA MINING TECHNIQUE FOR
EVALUATING THE CROWD DENSITY**

Saritha Banoth, Assistant Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

Estimating crowd density from a reference image has long been a problematic challenge in the fields of person and object identification, with a broad variety of possible implementation options. Existing techniques for predicting crowd density in reference images with backgrounds perform poorly because they only consider global parameters while ignoring perfectly acceptable density sensitive region features. We provide a novel strategy for fine grain crowd density assessment in the real environment based on our improved outer detection mining technology, which is inspired by comprehensive and sophisticated categorization and the object identification process. By combining ResNet and OT units to extract local characteristics of population density sensitive locations, this technique builds EO-ResNets networks, which greatly increases density estimate accuracy. By merging global and local data, we reach at our ultimate forecast findings.

**93. DEEP LEARNING TECHNIQUE FOR PREDICT
THE PERFORMANCE OF MEDICAL STUDENT**

Ambika Gannu, Assistant Professor, Department of Electrical and
Electronics Engineering, Siddhartha Institute of Technology & Sciences,
Narapally, Hyderabad, Telangana

Abstract

For selecting students who are competent of fulfilling the institution's aims, an admission valuation technique that is based on trustworthy and honest entry criteria is critical. This research looks into how deep learning approaches might help institutions improve performance analysis by forecasting applicants' semester development. The proposed technique was validated using data from 1860 students enrolled at a Calcutta institution from 2015 to 2017. The findings imply that depending on important selection factors, students' previous semester grades might be predicted before the final test. According to the statistics, the Intellectual Ability Selection Test result is the most reliable predictor of a candidate's future grade for several of the eligibility requirements. As a result, in prediction algorithms, this score should be given equal importance. We also discovered that the Deep Boltzmann Machine technique surpassed the other prediction algorithms we looked at, with a prediction performance of over 78 percent.

**94. NEURAL NETWORK REGRESSION FOR BRAIN
DISEASE CLASSIFICATION**

Fathima Zaheera, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

People all across the globe are concerned about brain cancer, which is one of the main causes of mortality. The majority of brain cancer diagnoses are made by surgeons and specialists reviewing digital scientific photography. Analyzing an X-ray report is a difficult undertaking, and extracting conclusions from them almost always requires expert knowledge. For biological picture recognition and X-Ray analysis, the enhanced Neural Network Regression was recently presented. Each picture and report often involves key and quantitative data. This research uses unique NNR algorithms to categorize a series of biological brain cancer photos based on basic and analytical data extracted from the images and X-Ray reports. A NNR Architecture, an AdaBoost, and an ensemble NNR and AdaBoost are all suggested for brain cancer picture identification. After extracting features, the decision-making work was executed using the suggested revised NNR frameworks and Classification and Regression Tree. The Accuracy, Precision, and F-Measure values in this investigation were the best.

**95. DETECTION OF ABNORMAL SIGNALS BASED ON
MANAGEMENT PROTOCOLS USING LASSO REGRESSION**

Kodi Rajesh, Associate Professor, Department of Electronics and
Communications Engineering, Siddhartha Institute of Technology &
Sciences, Narapally, Hyderabad, Telangana

Abstract

During combat, most individuals are unaware of the details of an enemy's anomalous signal transmission. As a result, auto anomalous signal tracking is required to locate, receive, diagnose, and investigate potentially dangerous wireless information signal. But at the other end, the fascinating mass detection methods can only identify anomalous signal characteristics such as spectral band and cannot gather any more data. We enable a novel management protocol characterization strategy based on the Lasso regression algorithm and Stacked Auto-Encoders in order to increase monitoring capabilities. The Stacked Auto-Encoders are shown first, followed by simulations of a management protocol segmentation approach based on Stacked Auto-Encoders. We maximize the method to boost efficacy. To get the attribute, we first clean the data via Lasso Regression. The property is then used as an input to Stacked Auto-Encoders to categorize network protocols. According to simulation findings, the suggested approach is effective at detecting management protocols.



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